

# RF/Microwave Products

## Anti-Rotate Microwave Connector with Field Replaceable Front End

Phoenix Logistics (PLI) introduces its Anti-Rotate (AR) connector series with a field replaceable front end. This series of PLI connectors eliminates the need for safety wire and results in significant time-savings during initial assembly/installation or whenever equipment is removed or replaced for service. These connectors maintain a size and footprint similar to standard connectors and completely maintain functionality without signal or system degradation in harsh and/or high vibration environments.

### Features & Benefits:

- Anti-Rotate
- Field Replaceable
- Eliminates Safety Wire
- Identical Size & Weight
- Reduced FOD
- Straight and 90° Plugs

The AR series connector provides a visual indication that the locking mechanism is engaged and the anti-rotate design keeps the connector oriented IAW the installation requirements.

The higher your frequency requirement (especially above 2GHz), the more important it is to make and maintain a quality connection. If your cable assembly operates in a high vibration or harsh environment, it's even more important to maintain that connection. Until recently, this was most often accomplished by the use of coupling nuts with lockwire holes and the associated lockwire to secure the coupling nut in place once the desired torque requirement had been achieved. If a technician needed to make a repair, the lockwire first needed to be removed creating a propensity for potential FOD. In addition to the safety concerns, there was also an inordinate amount of time devoted to making this type of repair. The PLI AR connector solves all of these problems.

The PLI AR stainless steel connector is designed to withstand all harsh aerospace environments – whether it's high vibration, salt spray, extreme temperature excursions, or a combination of all of these – while maintaining exceptional performance. Additionally, every cable assembly built by PLI utilizing this or any of our other connectors is tested for Insertion Loss and VSWR over the Test Frequency Range. The AR connector's technical operating specifications can be found on the back of this sheet.

This connector is available in the following series: ETNC, SMA, and Type N. If you're looking for a high performance connector — available for a variety of cable types and sizes— that's affordable and readily available, contact Phoenix Logistics.



ISO 9001 / AS 9100 Certified

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### Electrical Characteristics:

<b>Nominal Impedance</b>	50Ω
<b>Frequency Range</b>	DC-18 GHz
<b>Voltage Rating (max.) @ sea level</b>	1,000 VRMS, MAX
<b>Voltage Rating (max.) @ 70,000 ft.</b>	250 VRMS, MAX
<b>Insulation Resistance</b>	5000 MΩ
<b>Dielectric Withstanding Voltage</b>	1500 VRMS

### Environmental Characteristics:

PLI's Anti-Rotate connectors have been designed to meet the requirements of **Mil-T-81490 and Mil-C-87104**. The all stainless steel housings and couplings were designed to be robust in extreme vibration environments. In addition to vibration, the design considered all the requirements of Mil-T-81490 and Mil-C-87104 in order to offer a connector that can be applied on any platform and in any environment.

### Mechanical Characteristics:

<b>Pin Contact</b>	Beryllium Copper; Gold Over Nickel
<b>Outer Body</b>	Stainless Steel
<b>Coupling Nut</b>	Stainless Steel
<b>Locking Coupler</b>	Stainless Steel
<b>Compression Spring</b>	MW Cadmium Coating
<b>Crimp Ferrule</b>	Brass, ½ Hard; Gold Plate
<b>Braid Terminator</b>	Stainless Steel, Gold Plate
<b>Match Sleeve</b>	Stainless Steel
<b>Nut, Rear Clamp</b>	Stainless Steel
<b>Insulator</b>	PTFE
<b>Gasket</b>	Silicone

