

# Amphenol<sup>®</sup> RF

Global RF Solutions

## FEATURES & BENEFITS

**Operates at the same electrical performance as SMA up to 6 GHz**

**Snap-on interface for quick and easy installation**

**Rotatable 360° after connection for flexibility with installation**

## APPLICATIONS

**Base Stations**

**Cable Assemblies**

**Components (Filters, Amplifiers, Combiners)**

**Datacom**

**Routers**

**Switching Equipment**

**Telecom**



## QMA Connectors

*Amphenol RF is a member of the Quick Lock Formula<sup>®</sup> Alliance.  
For further information on the QLF<sup>®</sup>, visit [www.qlf.info](http://www.qlf.info).*

# QMA Connector Series

The QMA connector is a quick disconnect version of the SMA connector and shares the same internal construction, which allows the connector to have excellent performance. The electrical performance benefits of the QMA include low loss RF performance up to 6 GHz. Because of the innovative coupling mechanism, a 360-degree butt joint is maintained which results in low RF leakage. Since the RF line is identical to the SMA series, QMA connectors also offer the same high power handling capability. This gives the series significant advantages over other quick disconnect connectors, although QMA and SMA are not intermatable.

Mechanically the QMA series offers a more convenient installation than SMA connectors. Because the interface mates with a snap-on instead of a threaded coupling, there is a significant time advantage. Typically, these connectors can be installed into a system 10 times faster than an SMA connector. Another benefit of eliminating the threaded coupling is the denser packaging. The pitch between connector can be reduced because there is no requirement for wrench clearance. Finally, the connectors can be rotated 360 degrees after they are mated which greatly improves the flexibility of installations.

## Specification

### Electrical

Impedance	50 $\Omega$
Frequency Range	DC - 6 GHz
Return Loss	DC - 3 GHz > 32 dB 3 - 6 GHz > 25 dB
Insulation resistance	$\geq 5,000 M\Omega$

### Mechanical

Engagement Force	5.6 lbs (25 N)
Disengagement Force	4.5 lbs (20 N)
Retention Force for Interface	$\geq 13.5$ lb (60 N)
Mating Cycles	100

### Environmental

Temperature Range	- 40°C to +80°C
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## Part Number System Overview

930-1XXY-51Z

930: QMA Series

1XX: Sequential Number

Y: Connector Sex

- P - Plug
- J - Jack

Z: Body Style

- S - Straight
- A - Right Angle

## QMA Plugs

930-103P-51A: R/A Plug for .141 Semi-Rigid  
930-104P-51A: R/A Plug for .086 Semi-Rigid  
930-106P-51A: R/A Plug for LMR240  
930-108P-51S: Straight Plug for .141 Semi-Rigid  
930-110P-51A: R/A Plug for RG-58  
930-114P-51A: R/A Plug for RG-316  
930-115P-51S: Straight Plug for RD-316  
930-118P-51A: R/A Plug for RG-316  
930-119P-51S: Straight Plug for .086 Semi-Rigid  
930-120P-51S: Straight Plug for RG-58  
930-129P-51S: Straight Plug for RG-316

## Adapters

930-100A-51S: Jack to SMA Jack Adapter  
930-101A-51S: Plug to SMA Jack Adapter  
930-130A-51S: Plug to SMA Plug Adapter  
930-131A-51S: Jack to SMA Plug Adapter

## Jacks

930-102J-51P: Straight Jack PCB Thru-Hole  
930-105J-51P: Straight Jack Press Fit Rcpt  
930-107J-51P: Straight Jack Surface Mount Thru-Hole  
930-109J-51S: 4-Hole Flange Panel Mount Receptacle  
930-111J-51P: Bulkhead R/A Surface Mount  
930-112J-51S: 4-hole Flange Receptacle  
930-116J-51P: 4-Leg Thru-hole Jack  
930-117J-51S: 2-hole Flange Receptacle  
930-121J-51S: Straight Bulkhead Jack for .086  
930-122J-51S: Straight Bulkhead Jack  
930-123J-51S: Straight Bulkhead Jack for RD-316  
930-124J-51S: Straight Bulkhead Jack for RG-316  
930-125J-51S: Straight Bulkhead Jack for RG-58  
930-126J-51S: Bulkhead Receptacle  
930-127J-51S: Bulkhead Receptacle Front Mount  
930-128J-51P: R/A PCB Jack