

# QMA Connectors Series



## Product description

The original **QMA connectors**, designed by manufacturers Huber+Suhner and Radiall, have been available since 2003. Known as QLF\* QMA, they simply replaced the threaded connector of the widely used SMA connectors with a quick connect capability.

Anoison now offers the next generation of **QMA Connectors** with significant improvements and advantages over the older QLF QMA connectors.



Like all QMA connectors, Anoison's QMA connectors provide advantages over SMA connectors, including:

- Faster mating and de-mating (10X that of the threaded SMA connectors)
- Eliminates the need for a torque wrench
- Improves density by decreasing the overall size of the connector while still matching the electronic performance and reliability of their extremely popular predecessors
- Allows for 360° cable rotation after installation in order to make cable routing easier

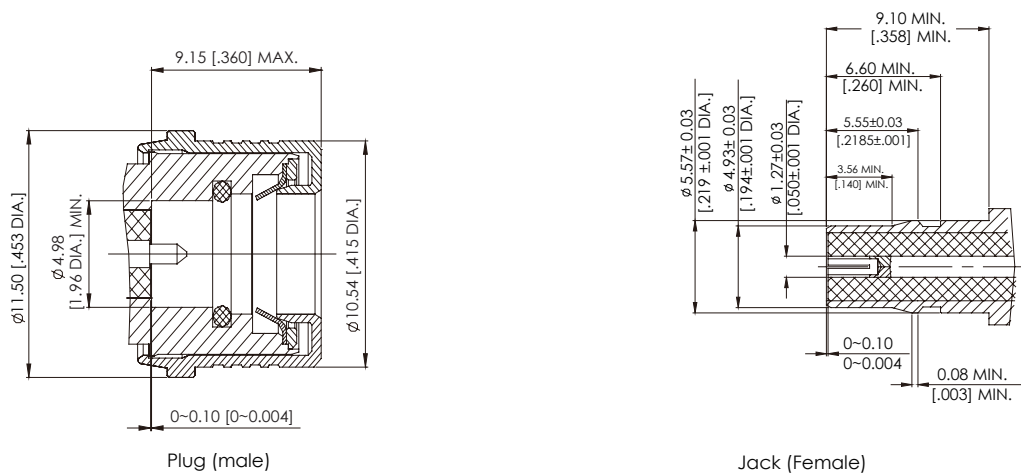
Beyond that the **Anoison QMA Connectors** provide further improvements over other QMA connectors, specifically:

- *Greater retention force* (10KGs min.) - Other QLF QMA connectors state a retention force of only 6 KGs.
- *Waterproof seal* – Waterproof seals (IP68) are standard on Anoison QMA connectors while older QMA connectors were not waterproof and only recently have others offered waterproof versions.
- *Significantly greater mating, de-mating cycles*, up to 500 cycles, while other QMA connectors only claim 100 cycles.

The Anoison QMA has achieved all of this while maintaining electronic performance comparable to the SMA up to 18 GHz while being completely inter-mateable with the QLF QMA.

\*QLF is a registered trademark of Huber + Suhner and Radiall

## QMA INTERFACE DIMENSIONS



## TECHNICAL DATA

ELECTRICAL DATA	
Impedance	50 $\Omega$
Frequency range	DC to 18GHz
Dielectric WithstandingVoltage	1000 V rms 50 Hz, sea level
Working Voltage	$\leq$ 480 V rms 50 Hz, sea level
VSWR	Straight connector, .141": $\leq$ 1.25 (DC~18 GHz) Straight connector, RG316: $\leq$ 1.23 (DC~6 GHz) Right angle connector, .141": $\leq$ 1.40 (DC~18 GHz) Right angle connector, RG316: $\leq$ 1.30 (DC~6 GHz)
Insulation Resistance	$5 \times 10^9$ M Ohms min. (initial)
Power Handling	150 W @ 2.5 GHz typical
Contact Resistance	
- Center contact	3.0 m $\Omega$ max.
- Outer contact	2.5 m $\Omega$ max.
Passive Intermodulation	- 120 dBc @ 1.8 GHz 2x20 W static
RF-leakage	
- DC - 3 GHz	-80 dB min.
- 3 - 6GHz	-70 dB min.
MECHANICAL	
REQUIREMENTS	
Mating Characteristics	
- Engagement Force	6 N typical
- Disengagement Force	13 N typical
Interface Retention Force	100 N min.
Durability (Mating Cycles)	200 min.
ENVIRONMENTAL	
TEST CONDITIONS	
Temperature Range	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204, Test Condition B
Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213, Test Condition B
Thermal Shock	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107, Test Condition B
Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101, Test Condition B
Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106, DWV 1000 Vrms (after drying)

Note: The above characteristics are typical but may not apply to all connectors.