

# SERIES QMA CONNECTORS

## DESCRIPTION

The QMA exhibits electronic performance comparable to the SMA up to 18 GHz. It is completely inter-mateable with the QLF QMA, but distinguishes itself by way of its waterproof seal (IP68) and a streamlining of its internal construction that reduces the amount of raw materials necessary for manufacture. This results in a very cost effective alternative to competing designs. This is in addition to 10x faster mating/de-mating than the traditional SMA, denser packaging because a torque wrench is no longer required for installation and greater flexibility since the connector may be rotated 360° while in the mated position.

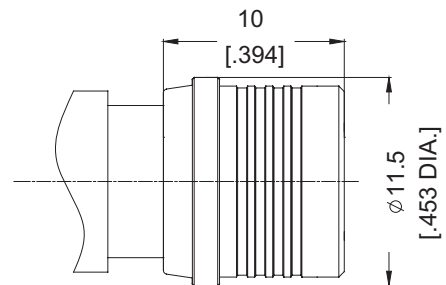


## CONTENT

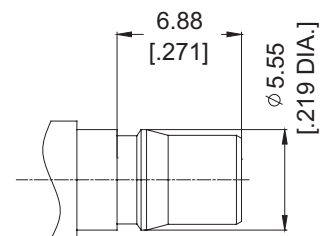
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## INTERFACE DIMENSIONS

Plug (male)



Jack (female)



## CHARACTERISTICS

ELECTRICAL	REQUIREMENTS
Impedance	50 $\Omega$
Frequency range	DC to 18 GHz
Dielectric Withstanding Voltage	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	$5 \times 10^3$ M $\Omega$ min.
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 to 3 GHz	- 80 dB min
-3 to 6 GHz	- 70 dB min

MECHANICAL	REQUIREMENTS
Mating Characteristics	
-Engagement Force	25 N typical
-Disengagement Force	30 N typical
Interface Retention Force	100 N min.
Durability ( Mating Cycles)	200 min.

ENVIRONMENTAL	REQUIREMENTS
Temperature Range	-40°C to +85°C
Thermal Shock	IEC 60169-1 16.4 (-40°C/ +85°C)
Corrosion	IEC 60169-1 16.7 (48 hrs)
Damp Heat	IEC 60169-1 16.3 (96 hrs) steady state
Vibration	IEC -68-2-64 random 5-20Hz: 1.29 (m/s <sup>2</sup> ) <sup>2</sup> /Hz 20-500Hz -3dB/octave
Dust & Moisture protection	IEC 60529
IP Rating interface	IP 68

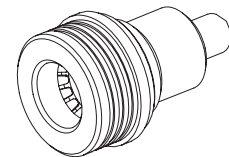
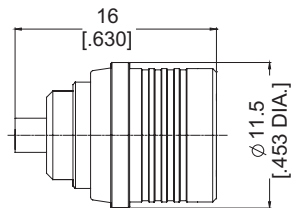
Note: The above characteristics are typical but may not apply to all connectors.

## CABLE CONNECTORS

### Straight Cable Plugs (male)

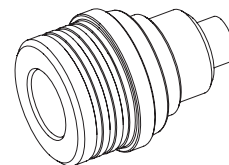
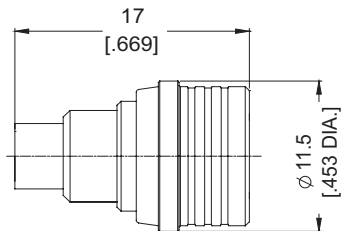
#### > for semi-rigid cables

Part No.	Description
ANO 2611-2038	QMA straight plug solder for Semi-rigid.047



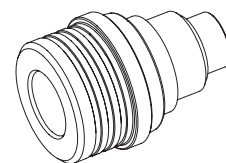
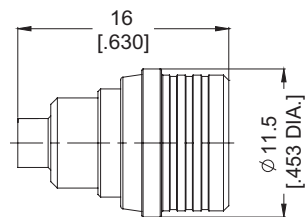
#### > for semi-rigid cables

Part No.	Description
ANO 2611-2001	QMA straight plug solder for Semi-rigid.141/RG402



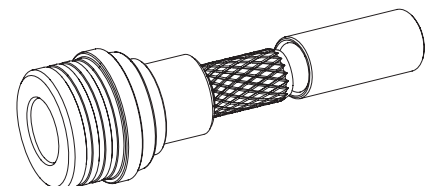
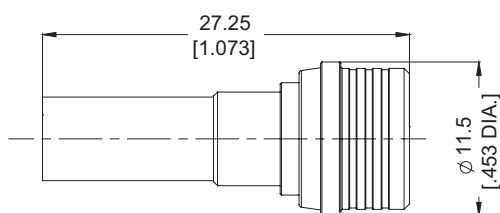
#### > for semi-rigid cables

Part No.	Description
ANO 2611-2020	QMA straight plug solder for Semi-rigid.086/RG405



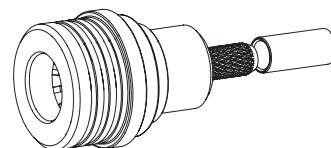
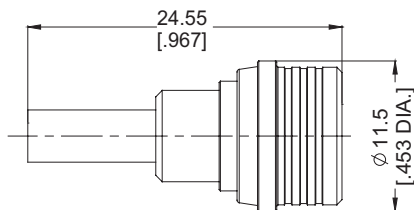
#### > for flexible cables

Part No.	Description
ANO 2611-2003	QMA straight plug crimp for RG58/LMR195



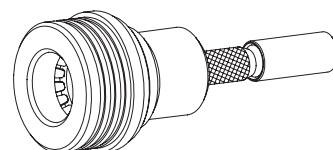
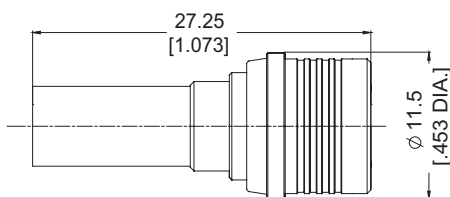
> for flexible cables

Part No.	Description
ANO 2611-2002	QMA straight plug crimp for RG174/RG316/LMR100



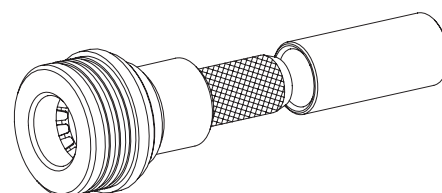
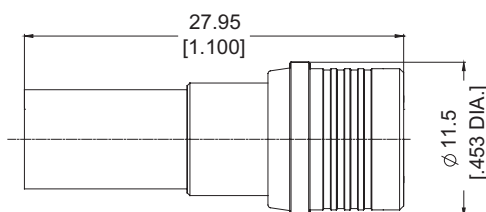
> for flexible cables

Part No.	Description
ANO 2611-2009	QMA straight plug crimp for RG142



> for flexible cables

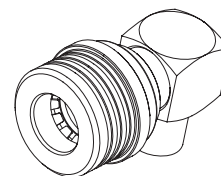
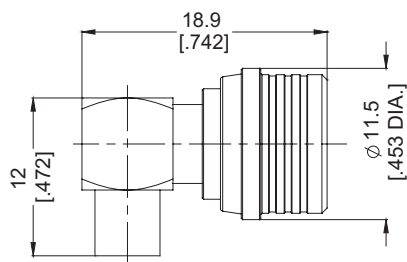
Part No.	Description
ANO 2611-2010	QMA straight plug crimp for LMR240



**Right Angle Cable Plugs (male)**

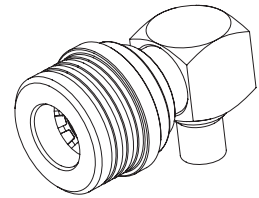
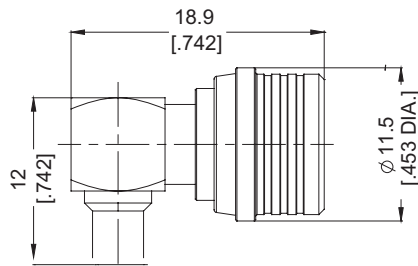
> for semi-rigid cables

Part No.	Description
ANO 2621-2022	QMA right angle plug solder for Semi-rigid.141/RG402



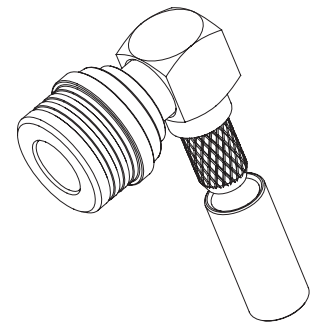
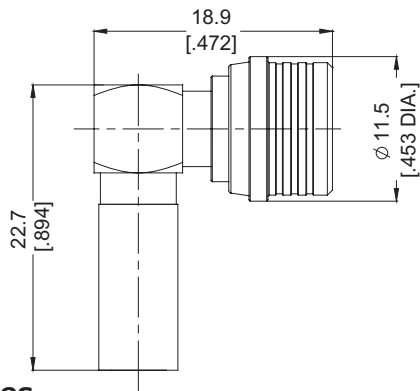
> for semi-rigid cables

Part No.	Description
ANO 2621-2028	QMA right angle plug solder for Semi-rigid.086/RG405



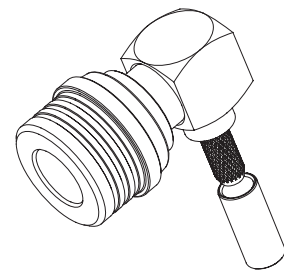
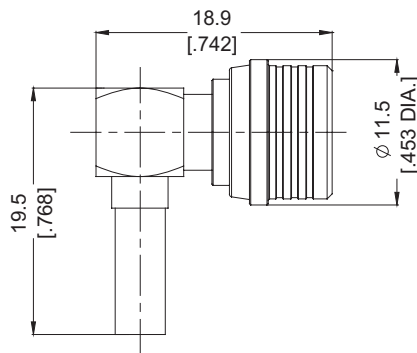
> for flexible cables

Part No.	Description
ANO 2621-2016	QMA right angle plug crimp for RG58/LMR195



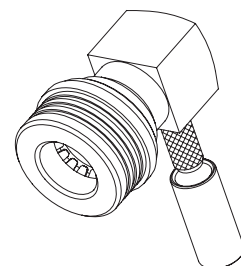
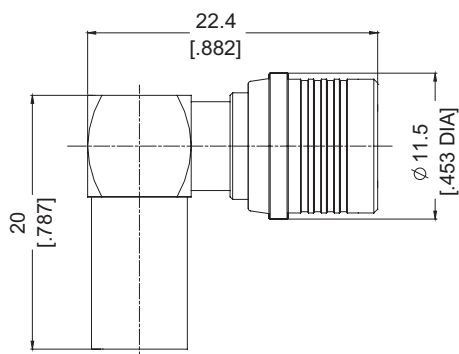
> for flexible cables

Part No.	Description
ANO 2621-2015	QMA right angle plug crimp for RG174/RG316/LMR100



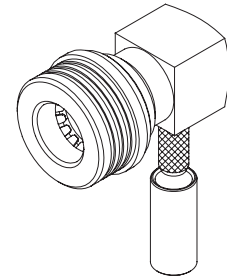
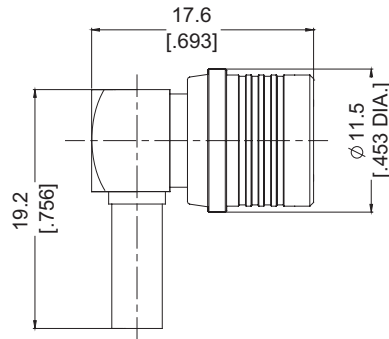
> for flexible cables

Part No.	Description
ANO 2621-2004	QMA right angle plug crimp for LMR240



> for flexible cables

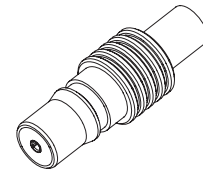
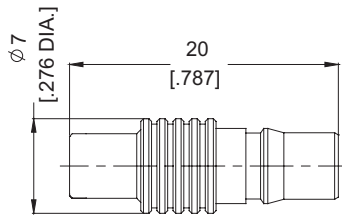
Part No.	Description
ANO 2621-2027	QMA right angle plug crimp for RG316D



**Straight Cable Jacks (female)**

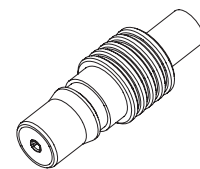
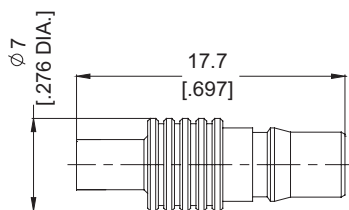
> for semi-rigid cables

Part No.	Description
ANO 2612-2011	QMA straight jack solder for Semi-rigid.141/RG402



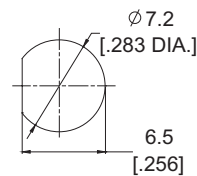
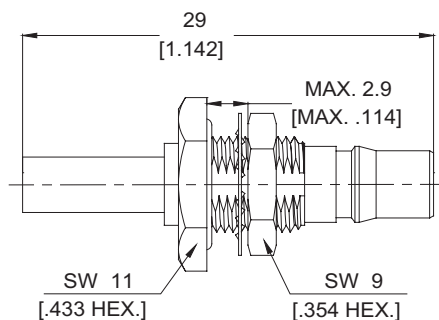
> for semi-rigid cables

Part No.	Description
ANO 2612-2029	QMA straight jack solder for Semi-rigid.086/RG405

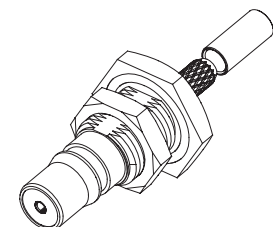


> for flexible cables

Part No.	Description
ANO 2612-1014	QMA straight jack bulkhead crimp for RG174/RG316/LMR100

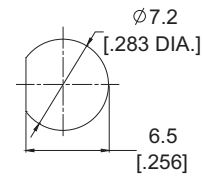
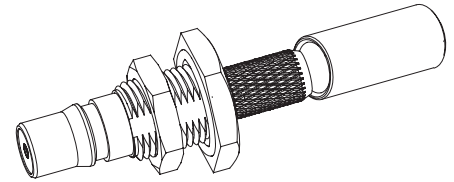
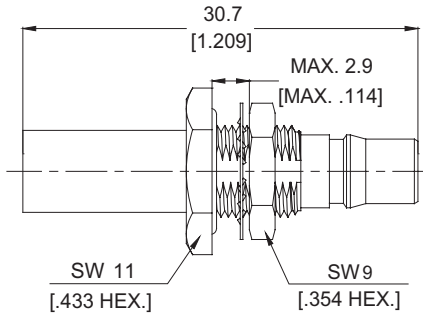


Mounting Dimensions



> for flexible cables

Part No.	Description
ANO 2612-1017	QMA straight jack bulkhead crimp for RG58/LMR195

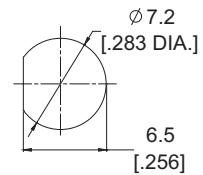
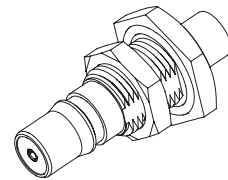
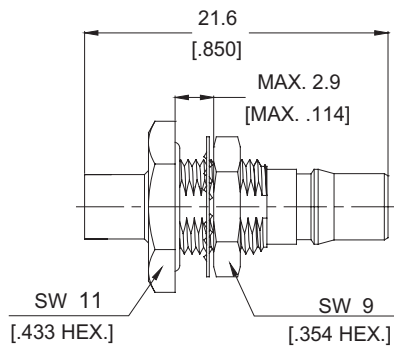


Mounting Dimensions

**Straight Bulkhead Cable Jacks (female)**

> for semi-rigid cables

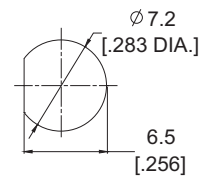
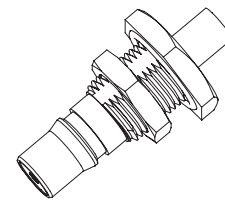
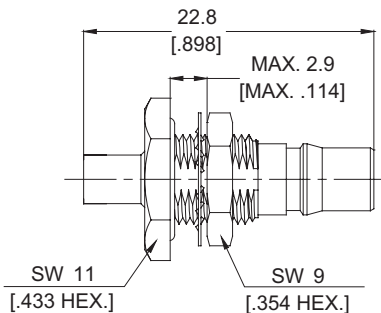
Part No.	Description
ANO 2612-1012	QMA straight jack bulkhead solder for Semi-rigid.141 /RG402



Mounting Dimensions

> for semi-rigid cables

Part No.	Description
ANO 2612-1030	QMA straight jack bulkhead solder for Semi-rigid.086 /RG405

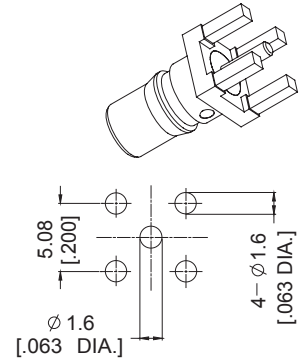
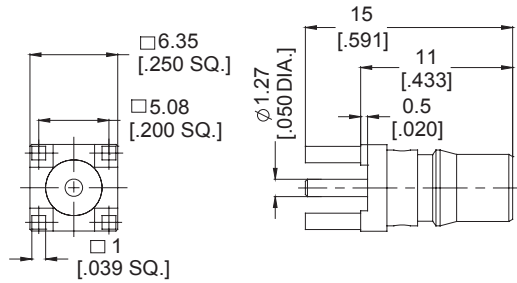


Mounting Dimensions

PCB CONNECTORS

> Straight PCB jacks

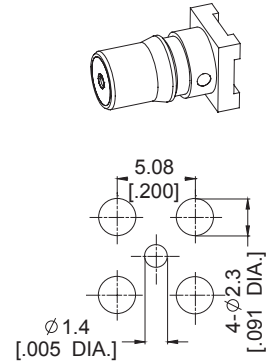
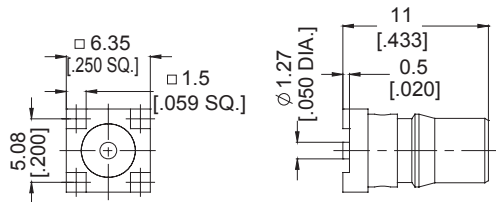
Part No.	Description
ANO 2612-4031	QMA straight jack, PCB mount, 4-hole



Mounting Dimensions

> Surface mount PCB mount type

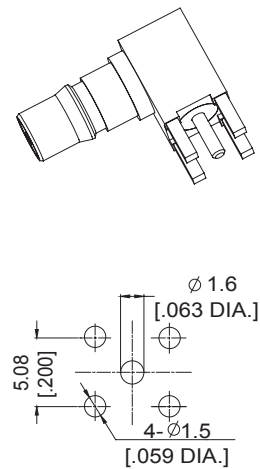
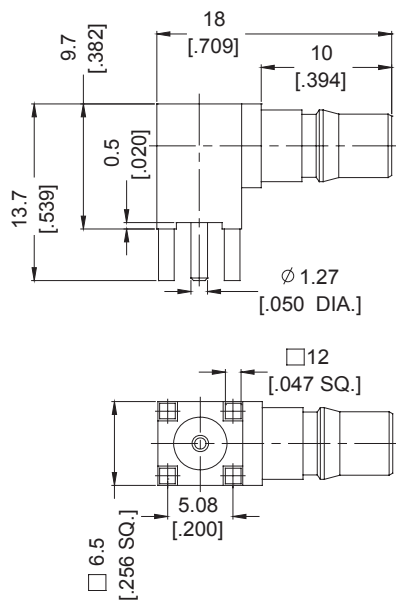
Part No.	Description
ANO 2612-4032	QMA straight jack, PCB SMT, 4-hole



Mounting Dimensions

> Right angle PCB jacks

Part No.	Description
ANO 2622-4026	QMA right angle jack, PCB receptacle



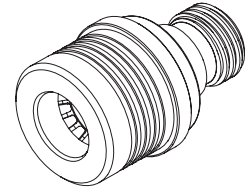
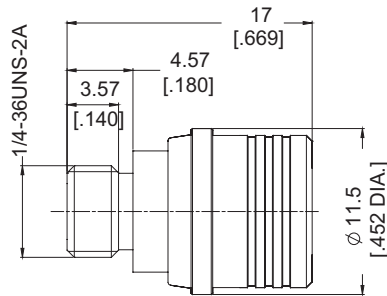
Mounting Dimensions





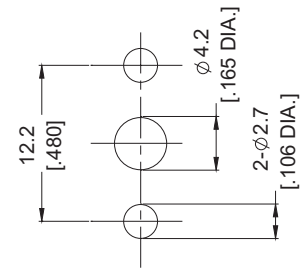
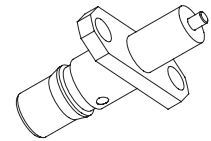
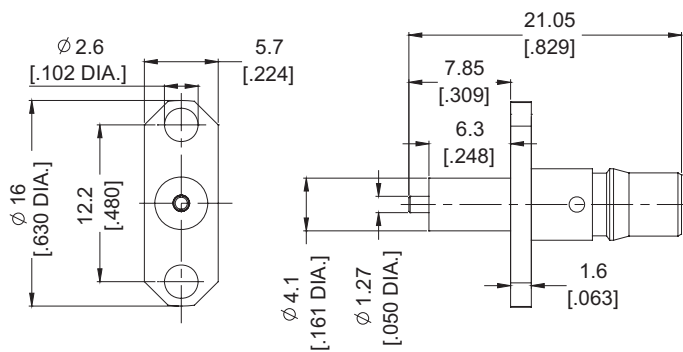
> Panel mount, bulkhead

Part No.	Description
ANO 2611-5006	QMA straight plug panel mount, screw on



> 2 Holes panel

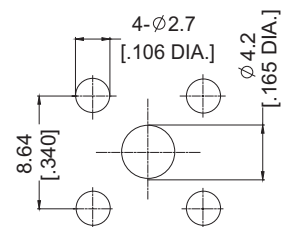
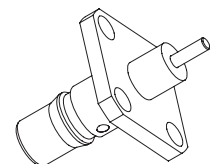
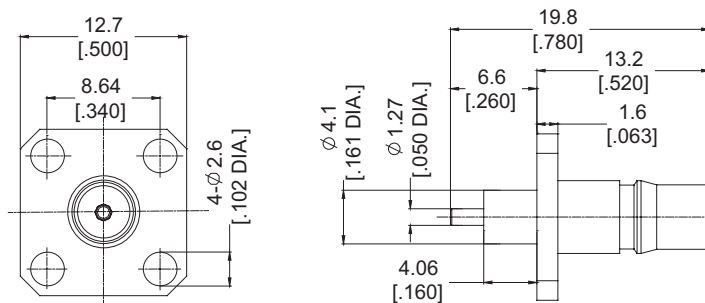
Part No.	Description
ANO 2612-3025	QMA jack receptacle, 2 hole flange



Mounting Dimensions

> 4 Holes panel

Part No.	Description
ANO 2612-3024	QMA jack receptacle, 4 hole square flange

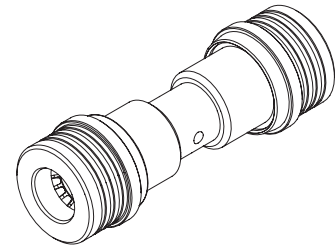
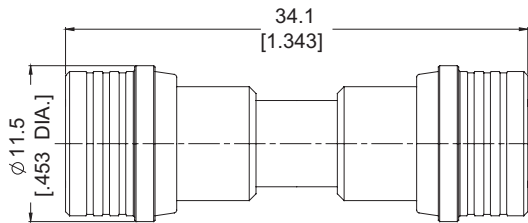


Mounting Dimensions

## IN SERIES ADAPTER

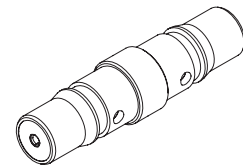
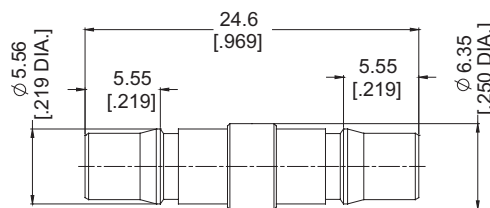
### > QMA / QMA

Part No.	Description
ANO 261-261-1026	QMA plug to QMA plug



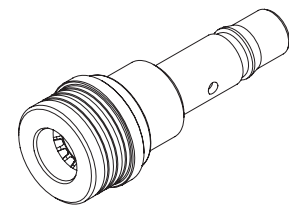
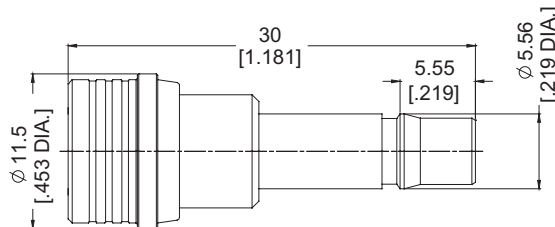
### > QMA / QMA

Part No.	Description
ANO 262-262-1027	QMA jack to QMA jack



### > QMA / QMA

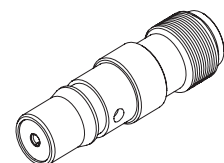
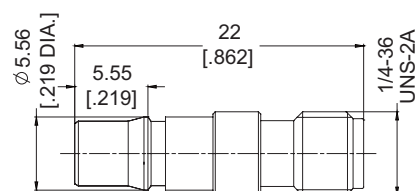
Part No.	Description
ANO 261-262-1028	QMA plug to QMA jack



## BETWEEN SERIES ADAPTERS

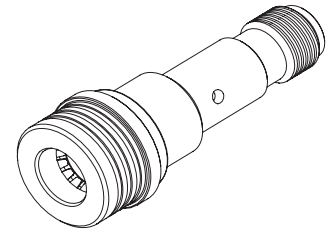
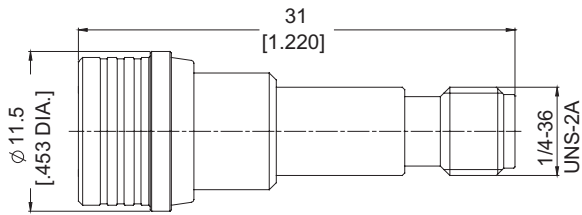
### > QMA / SMA

Part No.	Description
ANO 262-212-1030	QMA jack to SMA jack



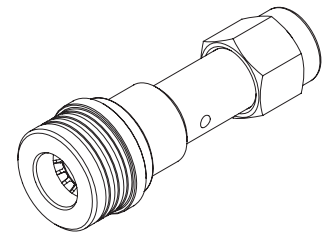
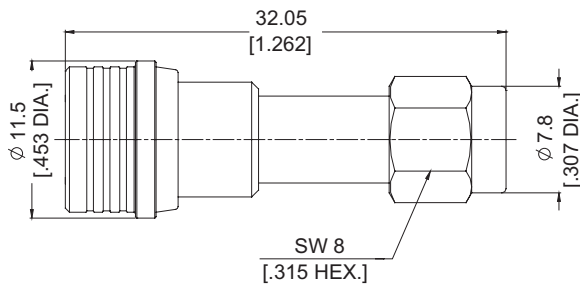
> QMA / SMA

Part No.	Description
ANO 261-212-1031	QMA plug to SMA jack



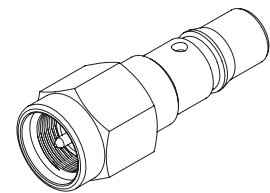
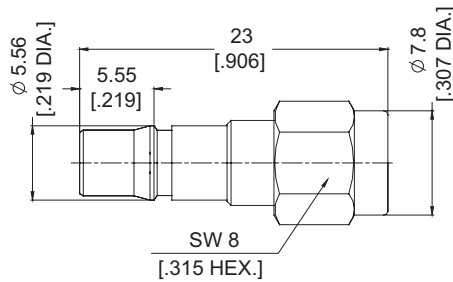
> QMA / SMA

Part No.	Description
ANO 261-211-1029	QMA plug to SMA plug



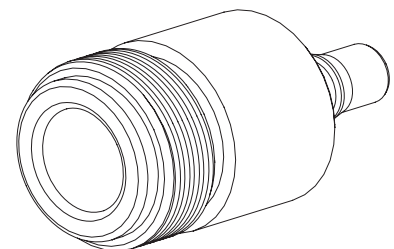
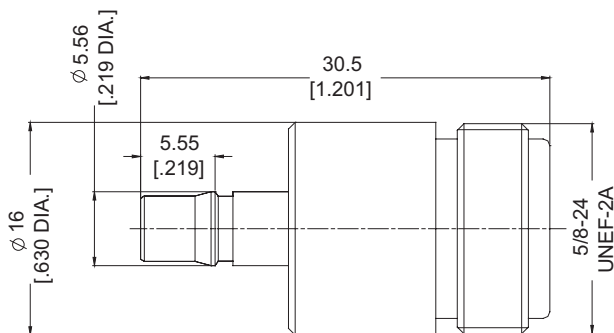
> QMA / SMA

Part No.	Description
ANO 262-211-1032	QMA jack to SMA plug



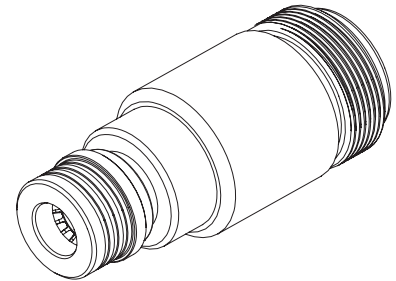
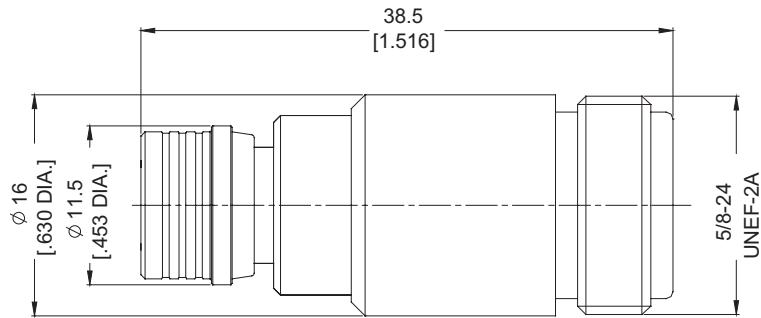
> QMA / N

Part No.	Description
ANO 262-512-1034	QMA jack to N jack



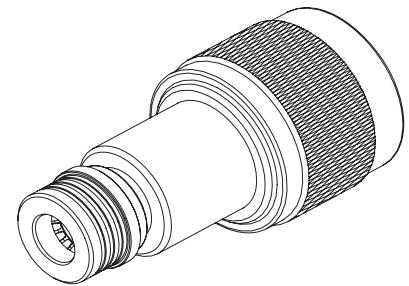
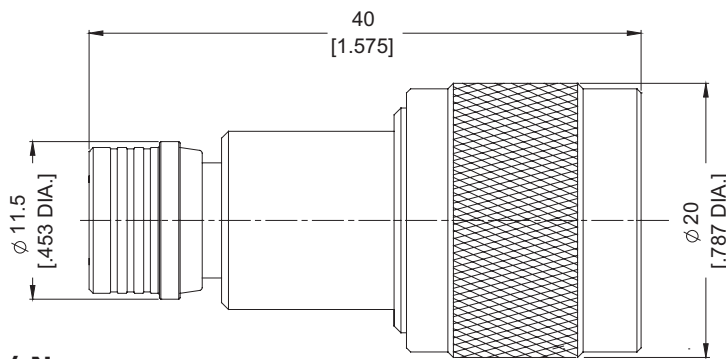
> QMA / N

Part No.	Description
ANO 261-512-1035	QMA plug to N jack



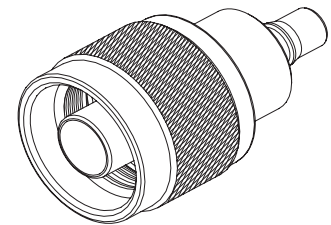
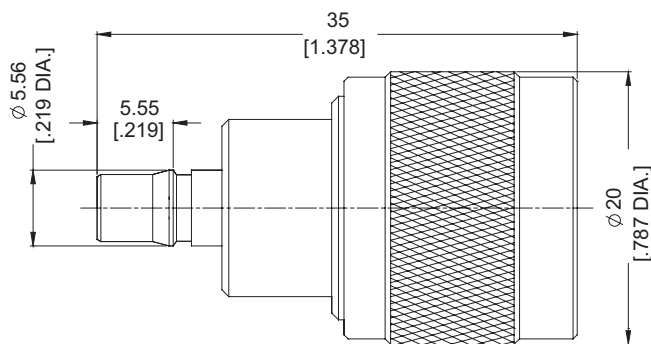
> QMA / N

Part No.	Description
ANO 261-511-1033	QMA plug to N plug



> QMA / N

Part No.	Description
ANO 262-511-1036	QMA jack to N plug



TERMINATION

> Low power 1 to 2W CW, 100W peak

Part No.	Description
ANO 261-701	RF Termination, QMA plug, 1W, 0-6GHz

