

The 1407 Series is a ruggedized 7-pin, bayonet coupled connector family. The 1407 is another one of Teledyne Reynolds' connector series that has been used extensively in airborne Traveling Wave Tube (TWT) and TWT Amplifier (TWTA) applications.

The 1407 comes in, both, shielded and non-shielded configurations. Plug kits are available for customer-fabricated cable assemblies using Teledyne Reynolds' wire.

**PLUG KIT**

(Dimensions shown as in/mm)

**Shielded (shown)**

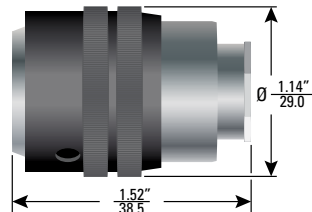
167-9454

- Uses Wire 167-8726

**Non-shielded**

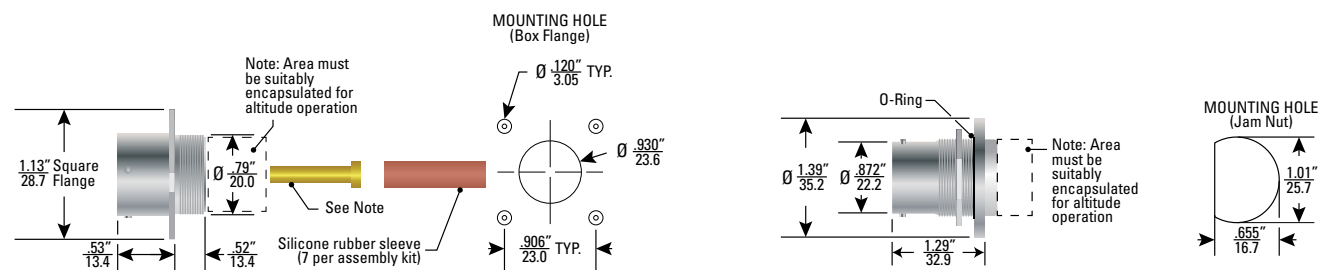
167-9571

- Uses Wire 167-9609



- While plug kits are available for customer-fabricated cable assemblies, Teledyne Reynolds highly recommends purchasing cable assemblies because of difficulties customers may experience in assembly and testing.
- Assembly instructions can be found at [www.teledynereynolds.com](http://www.teledynereynolds.com) or by contacting Teledyne Reynolds' Engineering.

**RECEPTACLE**



**Front, Box Flange Mount**

178-8996

- Plastic Insulator
- **Mounting:** See optional Box Flange mounting

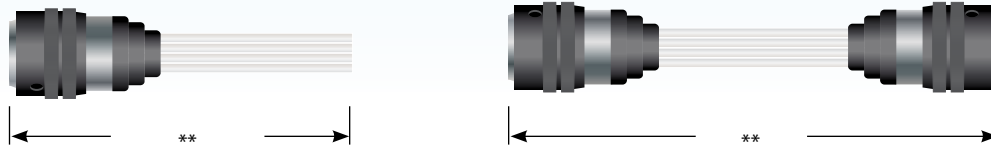
**Sealed, Rear, Jam Nut Mount**

167-8625

- Silicone Insulator
- **Mounting:** See optional Jam Nut mounting hole
- **Panel Mounting Torque:** 48 ± 4 in-lbs
- **Pressure:** Sealed for 1 ATM differential pressure
- **Max. Leak Rate:** 1x10<sup>-6</sup> cc/s He @1 ATM differential pressure

- Note: Contacts to be soldered to cable, inserted and bonded into insulator. Assembly instructions can be found at [www.teledynereynolds.com](http://www.teledynereynolds.com) or by contacting Teledyne Reynolds' Engineering.

**PLUG CABLE ASSEMBLIES**



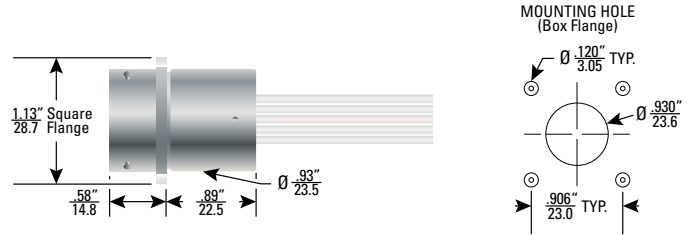
	SINGLE-ENDED	DOUBLE-ENDED	WIRE P/N
<b>SHIELDED</b>	167-9586	167-9618	167-8726
<b>NON-SHIELDED</b>	167-9603	167-9607	167-9609

**RECEPTACLE CABLE ASSEMBLIES**

**Front, Box Flange Mount**

178-8956 Uses Wire 167-9543

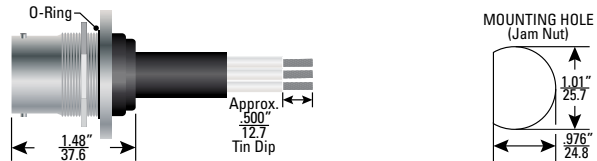
- Plastic Insulator
- **Mounting:** See optional Box Flange mounting hole



**Sealed, Rear, Jam Nut Mount**

167-8729 Uses Wire 167-9543

- Silicone Insulator
- **Mounting:** See optional Jam Nut mounting hole
- **Panel Mounting Torque:** 48 ± 4 in-lbs
- **Pressure:** Sealed for 1 ATM differential pressure
- **Max. Leak Rate:** 1x10<sup>-6</sup> cc/s He @1 ATM differential pressure



**SERIES SPECIFICATIONS**

(• = Same value as above)

Series	Voltage Rating (kVDC)	Altitude Rating (ft)	Operating Temp. (°C)	Current Rating (Amp)	Receptacle Insulator Material	Plug Insulator Material	Coupling Style	Coupling Nut Material/Finish	Plug Contact Material/Finish (Pin)	Recept. Contact Material/Finish (Socket)	Wire Type	Wire Insulation	Braid Termination	Test Voltage @ 70,000 ft @ Sea Level (kVDC)	Test Voltage @ 1 kHz (kVDC)
1407	10	70,000	-55 to 125	10	Silicone	Silicone or Plastic	Bayonet	Al/Ni	Brass/Au	BeCu/Au	Shielded or Non-shielded	FEP	Band	15	N/A

**WIRE SPECIFICATIONS**

Part Number	Operating Voltage (kVDC)	Conductor			Insulation		Shielding			Jacket		Impedance Ω	Attenuation dB/100 ft @ 400 MHz	Capacitance pF/ft (Nom.) @ 1 kHz
		AWG	Strands	Plating	Material	ø in./mm	AWG	Plating	ø in./mm	Material	ø in./mm			
167-8726	26	22	19/34	SPC	FEP	0.100 / 2.54	36	SPC	0.12 / 3.05	FEP	0.145 / 3.68	50	TBD	30
167-9609	30	20	19/32	TPC	•	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>1</sup>Current Rating value depending on the wire that is selected. Current rating is per pin for multi-pin connectors. Based on your specific application, additional derating may be required.

\*\*Cable Assembly Ordering Information: All cable assembly cable lengths are to be specified in inches only. For example, to order part number 178-6027 with a cable length of 10 feet 8 inches the cable assembly part number would be specified as 178-6027-128N.

• **Note:** Product numbers and specs subject to change without notice. • Products listed represent only a small selection of Teledyne Reynolds' products please visit [www.teledynereynolds.com](http://www.teledynereynolds.com) for the most up to date product information. • Contact Teledyne Reynolds' Engineering to discuss custom designs. **WARNING: Connectors should NEVER be handled mated or unmated when voltage is applied.**