

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)

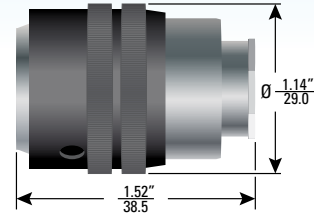
Shielded (shown)

167-9454 Uses Wire 167-8726

Non-shielded

167-9571 Uses Wire 167-9609

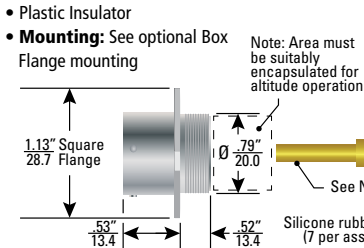
- While plug kits are available for customer-fabricated cable assemblies, Teledyne Reynolds highly recommends purchasing cable assemblies because of difficulties customers may experience in assembly and testing.
- Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne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



RECEPTACLE

Front, Box Flange Mount

178-8996

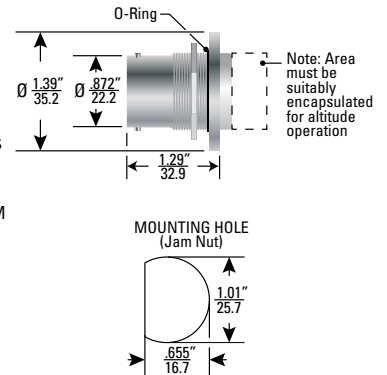


- Plastic Insulator
- **Mounting:** See optional Box Flange mounting
- Note: Contacts to be soldered to cable, inserted and bonded into insulator. Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne Reynolds' Engineering.

Sealed, Rear, Jam Nut Mount

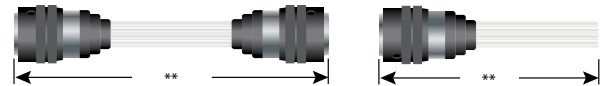
167-8625

- 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:** 1x10⁻⁶ cc/s He @1 ATM differential pressure



PLUG CABLE ASSEMBLIES

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

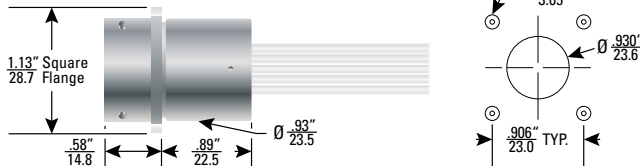


RECEPTACLE CABLE ASSEMBLIES

Front, Box Flange Mount

178-8956 Uses Wire 167-9543

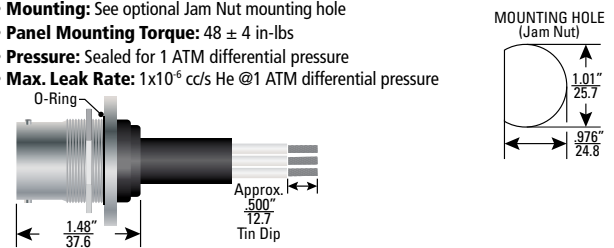
- Plastic Insulator
- **Mounting:** See optional Box Flange mounting hole



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:** 1x10⁻⁶ 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 (kVDC)	Test Voltage @ Sea Level (kVDC)
1407	10	70,000	-55 to 125	6 or 8 ¹	Silicone	Silicone or Plastic	Bayonet	Al/Ni	Brass/Au	BeCu/Au	Shielded or Non-shielded	FEP	Band	15	N/A

WIRE SPECIFICATIONS

Part #	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

¹Current Rating value depending on the wire that is selected.

**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 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.**