HIGH VOLTAGE
MULTI-PIN CONNECTORS

INTRODUCTION

Teledyne Reynolds' high voltage multi-pin connectors are known industry wide for their reliability in harsh environments, their small size compared to other manufacturer's connector designs for the same voltage rating and their overall outstanding quality.

This catalog contains a selection of multi-pin, high voltage connectors and cable assemblies. These products, some of which have been in production for more than forty years, reflect the legacy of Teledyne Reynolds' strong commitment to engineering, quality and customer service.

Teledyne Reynolds, Inc. leads the connector industry worldwide in the design of high voltage connectors capable of operating at altitudes of 70,000 feet (21.34 km) and above while exposed to temperatures as low as -55°C and up to 125°C. Not all connectors in this catalog are designed to operate at those extremes, but all will perform with a high degree of reliability when operated as specified.

Within this catalog is also the Advanced Group of connectors that use Teledyne Reynolds' patented Advanced Interface Sealing. Technologically advanced, these connectors represent the state-of-the-art in high voltage connector design and manufacture.

TELEDYNE REYNOLDS
Everywhereyoulook™

Approved for Public Release: AA-008/13

Rev. 100913

PATENTED ADVANCED INTERFACE SEALING SYSTEM™

Teledyne Reynolds, Inc. (TRI) pioneered the development of miniature high voltage connectors used within non-pressurized areas of high altitude flying aircraft over forty years ago. This ingenuity is clearly evident in Teledyne Reynolds' patented Advanced Interface Sealing System™ that is used in the Advanced Group of connectors. The Advanced Group consists of a series of nine connector families, four of which are included this brochure. The following are the more significant advantages of selecting from the Advanced Group of high voltage connectors.

REPAIRABLE / REPLACEABLE

The seals are molded from a proprietary blend of high grade silicone rubber which allows the seal to function over a temperature range of -55° to 125°C. Because the seal is a separate component of the connector, it can be individually inspected, tested and installed. In addition, if necessary a damaged seal can be removed and replaced. This is not the case in conventional high voltage connectors where the insulator is one piece and a failure of any one pin or circuit usually results in the entire connector or, worse yet, a total cable assembly being scrapped or subjected to a costly repair operation.

ADVANCED INTERFACE SEAL™ ENGAGEMENT

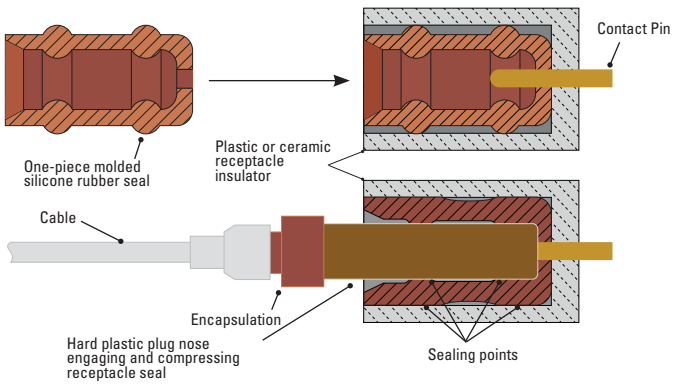

Figure 1

SCALABILITY

The unique design of the Advanced Interface Sealing System™ permits the size of the seal and the connector to be scaled up or down to accommodate higher or lower operating voltages and larger or smaller mounting spaces. Our largest seal is in the Max and Maxxum series and the smallest in the JR series. This enables a high degree of customization to meet evolving customer needs.

MATING

Conventional high voltage connectors require very high mating torque levels in order to effect and maintain an axial high voltage seal. In addition, they must continually compensate for the effects of compression set which is common in connectors using a cone shape or axial compression to achieve a seal. Compensating devices are expensive, bulky and often require special tools and even gauges to reliably mate the connectors.

Connectors using the Advanced Interface Sealing System™ require no undue mating forces and no compensation is ever required to maintain the integrity of the mated interface seal. In fact, once these connectors are fully mated, they need only be sufficiently held in place to resist severe vibration and shock. This is due to the use of redundant radial seals in the Advanced Interface Sealing System™. Once the hard plastic insulator of the plug engages the radial rings on the receptacle seal, the high voltage interface seal is complete and will remain so until the plug insulator is withdrawn during any subsequent un-mating operation. The engagement of the seal is illustrated in Figure 1.

DESIGN FLEXIBILITY

Systems and Component Packaging Engineers will find connectors and the appropriate cable in the Advanced Group to satisfy a wide range of voltage and current ratings, shielded or non-shielded, ceramic or plastic, and single or multi-pin configurations. These choices allow the designer to utilize available space and maximize package density. Visit the www.teledynereynolds.com or speak to one of our Application Engineers to learn about the variety of shapes and contact arrangements that can be assembled from products in the Advanced Group.

MULTI-PIN CONNECTOR PRODUCT MATRIX

(• = Yes and Blank = No)

Series	Voltage Rating (kV)	At 70,000 ft	Number of Contacts	Advanced Series	Coupling Method	Shielded	Ceramic Feedthrough	Bag Assembly*	Temperature Rating (°C)
JR	6	•	4 & 6	•	Jack Screw	•			-55 to 125
1205	7.5	•	5		Bayonet	•		•	-55 to 105
1407	10	•	7		Bayonet	•		•	-55 to 125
PeeWee	12	•	2 & 8	•	Jack Screw & Threaded		•		-55 to 125
Magnum**	12	•	6	•	Bayonet	•	•		-55 to 125
Hi/Mate™	13.5	•	Various	•	MIL-DTL-38999				-55 to 125
Hi/Mate$_D$™	13.5	•	Various	•	D-Sub				-55 to 125
1804	15	•	4		Bayonet & Threaded	•		•	-55 to 125
1807	15	•	7		Bayonet & Threaded	•		•	-55 to 125
155	20	•	5		Bayonet			•	-55 to 125
403	35	•	3		Bayonet	•			-55 to 125

Teledyne Reynolds welcomes the opportunity to submit alternate design proposals when our standard items do not satisfy your requirements.

*Bag assemblies enable customers to build their own cable assemblies using assembly instructions found at www.teledynereynolds.com. Wire is not included in kits and may be ordered separately from Teledyne Reynolds. Although this option is available, Teledyne Reynolds highly recommends purchasing already built cable assemblies because of difficulties customers may experience in assembly and testing.

**The Magnum Series is subject to the export jurisdiction of the U.S. Department of State and may require export license or other approval from the U.S. Department of State.

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JR SERIES | 6 kVDC | 70,000 FT | -55° TO 125°C | 4 & 6-Pin

JR is a series of subminiature high voltage cable assemblies that are ideally designed to interconnect low power, mini-TWTs to a power supply in Radar or Electronic Countermeasure (ECM) systems. Since their introduction, these high contact density assemblies have also found applications in laser systems, photomultiplier detection systems, night vision systems and other applications where high voltage in a small package with a highly, flexible cable harness is required.

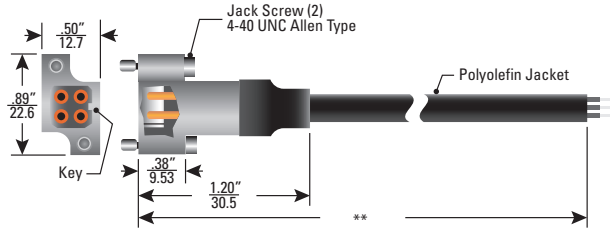
JR Series connectors are only available as pre-assembled plug or receptacle cable assemblies. Each assembly is wired with Teledyne Reynolds' Ready-to-Bond™ etched FEP or silicone coated, FEP cable. A braided shield or NOMEX® woven jacket is optional. The insulator is a thermoplastic on both the plug and receptacle, but the Advanced Interface Seals™ contained in the receptacle are silicone. The receptacle and plug bodies are nickel plated aluminum.

PLUG CABLE ASSEMBLIES

(Dimensions shown as in/mm)

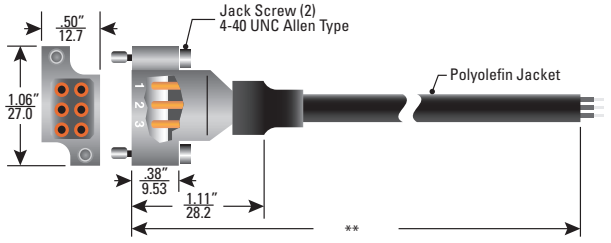
4-pin, Single-Ended, Shielded

178-9718 Uses Wire 178-8111



6-pin, Single-Ended, Shielded

178-8363 Uses Wire 178-8111

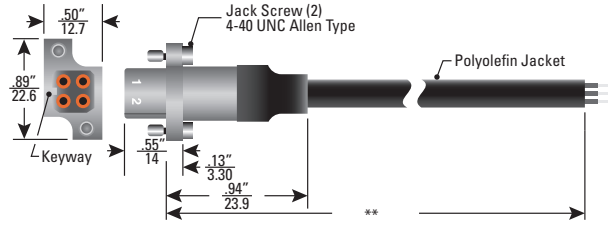


- For smaller overall size, the 6-pin JR is available without metal housing and shielding. Contact Teledyne Reynolds for more information.

RECEPTACLE CABLE ASSEMBLIES

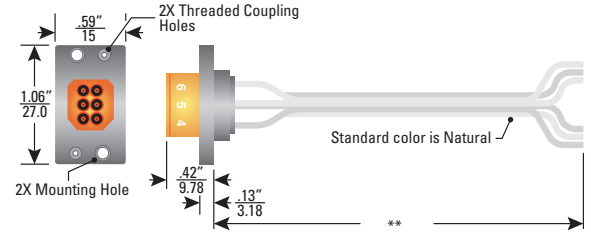
4-pin, Single-Ended, Shielded, Rear Mount

178-9719 Uses Wire 178-8111



6-pin, Single-Ended, Front Mount

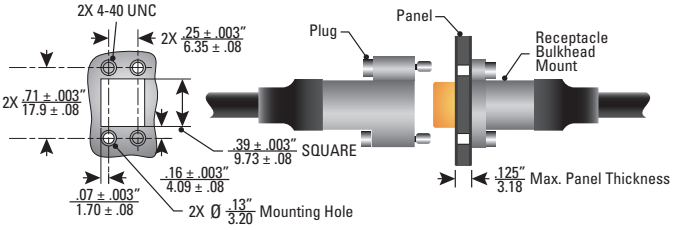
178-8362 Uses Wire 178-8410



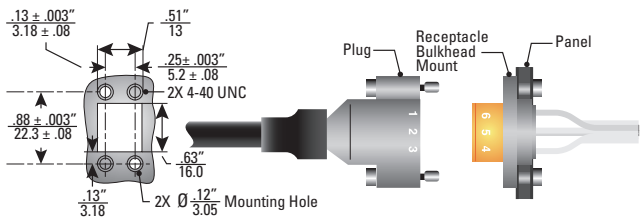
- For smaller overall size, the 6-pin JR is available without metal flange. Contact Teledyne Reynolds for more information.

PANEL CUTOUT DIMENSIONS AND MOUNTING EXAMPLES

4-pin



6-pin



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 (Socket)	Recept. Contact Material/Finish (Pin)	Wire Type	Wire Insulation	Braid Termination	Test Voltage @ 70,000 ft (kVDC)	Test Voltage @ Sea Level (kVDC)
JR	6	70,000	-55 to 125	5	Plastic	Plastic	Jack Screw	Al/Ni	BeCu/Au with CRES hood	Brass/Au	Shielded or Non-shielded	FEP	Crimp	9	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			
178-8111	18	24	19/36	SPC	FEP	0.05 / 1.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
178-8410	•	•	•	•	•	0.58 / 1.48	•	•	•	•	•	•	•	•

**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.**

1205 SERIES | 7.5 kVDC | 70,000 FT | -55° TO 105°C | 5-Pin

The 1205 Series has been in production since 1970. This series has been used extensively in airborne Traveling Wave Tube (TWT) and TWT Amplifier (TWTA) applications.

The 1205 comes in, both, shielded and non-shielded configurations. The bayonet coupling design provides secure mating.

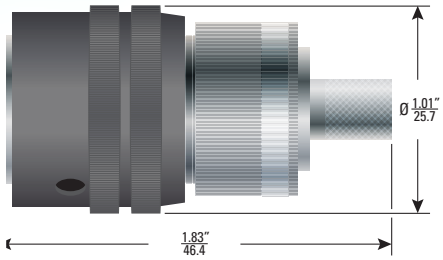
PLUG KIT

(Dimensions shown as in/mm)

Shielded (shown)
167-9504 Uses Wire: 167-9346

Non-shielded
167-9509 Uses Wire: 167-9543

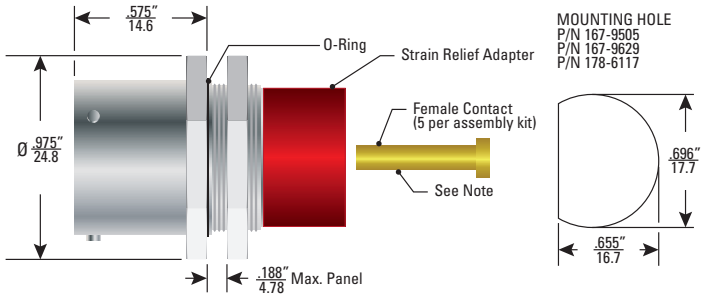
- While plug kits are available for customer-fabricated cable assemblies, Teledyne Reynolds highly recommends purchasing cable assemblies because of difficulties customers may experience in assembly and testing.
- Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne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



RECEPTACLE

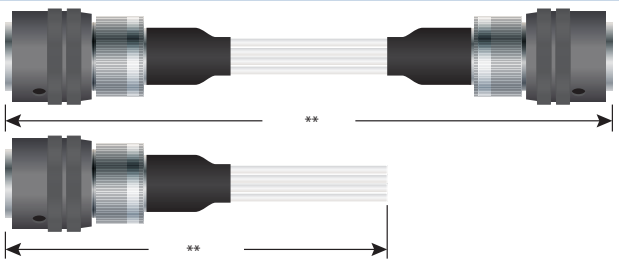
Sealed, Front Panel Mount
178-6117

- Plastic Insulator
- **Mounting:** See optional 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
- 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.



PLUG CABLE ASSEMBLIES

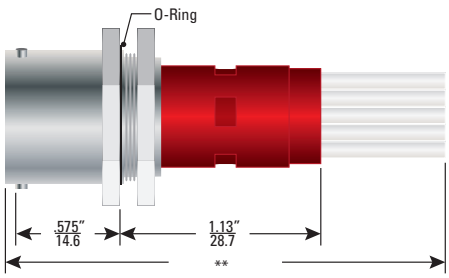
	SINGLE-ENDED	DOUBLE-ENDED	WIRE P/N
SHIELDED (SHOWN)	167-9627	167-9630	167-9346
NON-SHIELDED	167-9628	167-9631	167-9543



RECEPTACLE CABLE ASSEMBLIES

Sealed, Front Panel Mount
167-9629 Uses Wire 167-9543

- Rubber Insulator
- **Mounting:** See optional 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)
1205	7.5	70,000	-55 to 105	6 or 8[†]	Silicone	Silicone or Plastic	Bayonet	Al/Ni	Brass/Au	BeCu/Au with CRES hood	Shielded or Non-shielded	FEP	Band	10	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			
167-9543	21	20	19/32	TPC	FEP	0.080 / 2.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
167-9346	•	22	19/34	SPC	•	•	36	SPC	0.100 / 2.54	FEP	0.125 / 3.18	43	10.6	35

[†]Current 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.**

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1407 SERIES | 10 kVDC | 70,000 FT | -55° TO 105°C | 7-Pin

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.

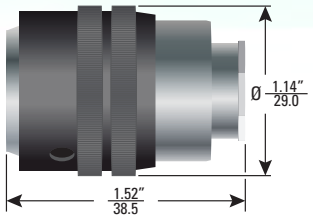
PLUG KIT

(Dimensions shown as in/mm)

Shielded (shown)
167-9454 Uses Wire 167-8726

Non-shielded
167-9571 Uses Wire 167-9609

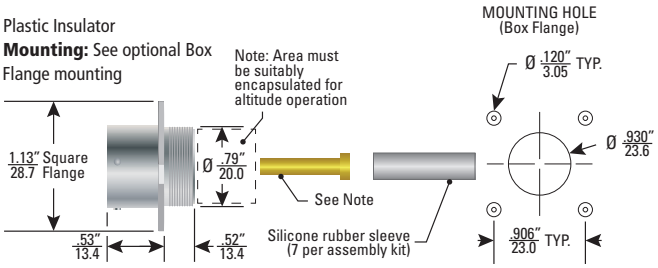
- While plug kits are available for customer-fabricated cable assemblies, Teledyne Reynolds highly recommends purchasing cable assemblies because of difficulties customers may experience in assembly and testing.
- Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne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



RECEPTACLE

Front, Box Flange Mount
178-8996

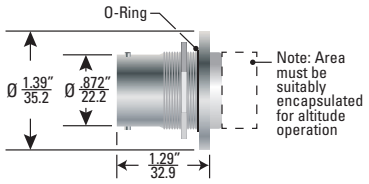
- Plastic Insulator
- **Mounting:** See optional Box Flange mounting

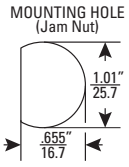


- Note: Contacts to be soldered to cable, inserted and bonded into insulator. Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne Reynolds' Engineering.

Sealed, Rear, Jam Nut Mount
167-8625

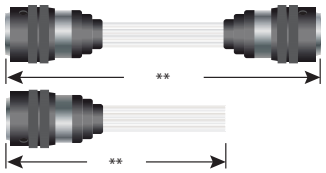
- Silicone Insulator
- **Mounting:** See optional Jam Nut mounting hole
- **Panel Mounting Torque:** 48 ± 4 in-lbs
- **Pressure:** Sealed for 1 ATM differential pressure
- **Max. Leak Rate:** 1x10^{-6} cc/s He @1 ATM differential pressure





PLUG CABLE ASSEMBLIES

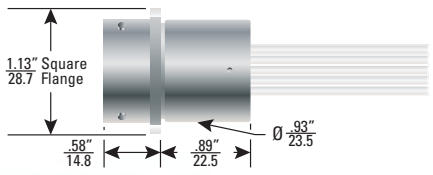
	SINGLE-ENDED	DOUBLE-ENDED	WIRE P/N
SHIELDED	167-9586	167-9618	167-8726
NON-SHIELDED	167-9603	167-9607	167-9609

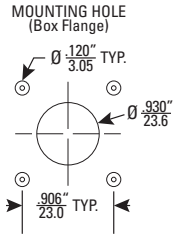


RECEPTACLE CABLE ASSEMBLIES

Front, Box Flange Mount
178-8956 Uses Wire 167-9543

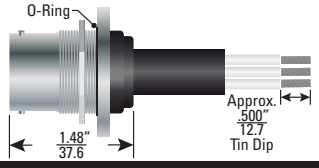
- Plastic Insulator
- **Mounting:** See optional Box Flange mounting hole

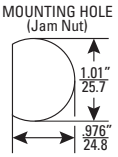




Sealed, Rear, Jam Nut Mount
167-8729 Uses Wire 167-9543

- 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†	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

†Current 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.**

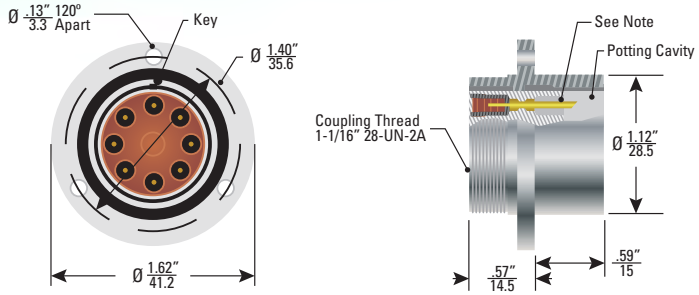
PeeWee is one of a family of subminiature, high-voltage connectors for use in high voltage applications where dense electronic packaging is required. The PeeWee connector uses Teledyne Reynolds' patented Advanced Interface™ method of sealing high voltage at reduced atmospheric pressure, which allows the connector to be rated at 12 kVDC at 70,000 feet with a temperature range of -55° to 125°C.

RECEPTACLE

(Dimensions shown as in/mm)

8-pin, Front, Box Flange Mount

178-9335

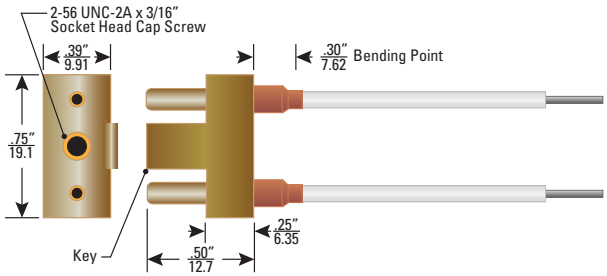


Note: Contact to be soldered to cable using Sn60 solder. Max. temp. 400° F (204° C)

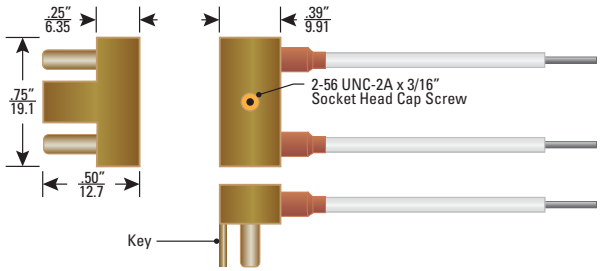
PLUG CABLE ASSEMBLIES

2-Pin

Single-ended



Single-ended, Right Angle

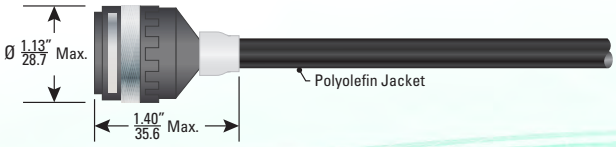


STRAIGHT	RIGHT ANGLE	WIRE TYPE	WIRE P/N
178-8566	178-8477	Etched FEP	178-8111
178-8557	178-8553	Silicone Coated FEP	178-8066
178-8558	178-8554	Etched FEP, NOMEX® Jacket	178-8118
178-8559	178-8555	Silicone Coated FEP, NOMEX® Jacket	178-8066

8-Pin

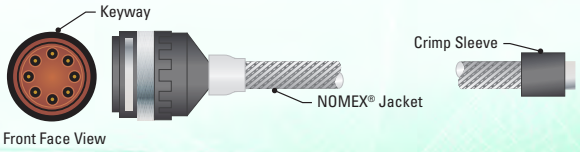
Single-ended

178-9337



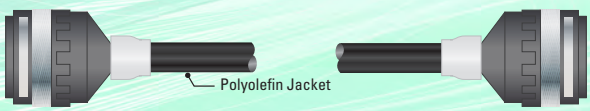
Shielded, Single-ended

178-9339



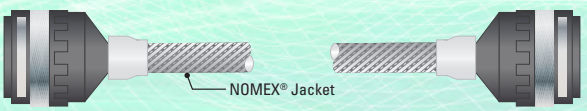
Double-ended

178-9338



Shielded, Doube-ended

178-9340



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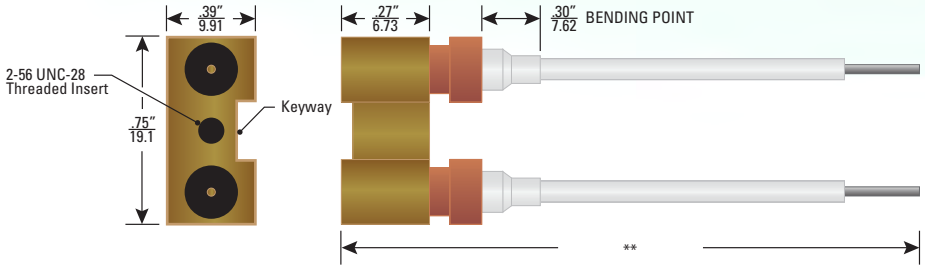
RECEPTACLE CABLE ASSEMBLIES

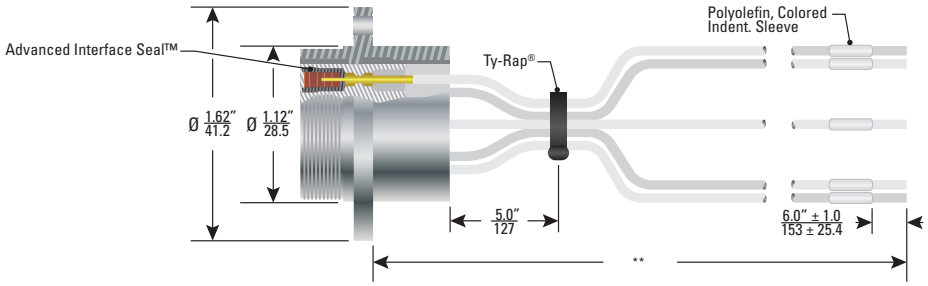
2-pin, Single-ended



SINGLE-ENDED	WIRE TYPE	WIRE P/N
178-8433	Etched FEP	178-8111
178-8560	Silicone Coated FEP	178-8066
178-8561	Etched FEP, NOMEX® Jacket	178-8118
178-8562	Silicone Coated FEP, NOMEX® Jacket	178-5789

8-pin, Single-ended, Front, Box Flange Mount

178-9336 use wire 178-8066



Note: Exposed cable insulation on NOMEX® covered single-ended cable assembly will be 1/2 inch less the cable length, unless otherwise specified.

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 (Socket)	Recept. Contact Material/Finish (Pin)	Wire Type	Wire Insulation	Braid Termination	Test Voltage @ 70,000 ft (kVDC)	Test Voltage @ Sea Level (kVDC)
PeeWee	12	70,000	-55 to 125	5	Plastic	Plastic	Threaded or Jack Screw	Al/Ni	BeCu/Au with CRES hood	Brass/Au	Shielded or Non-Shielded	FEP	Band	18	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			
178-8111	18	24	19/36	SPC	Etched FEP	0.050 / 1.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
178-8118	•	•	•	•	•	•	•	•	•	Nomex®	TBD	•	•	•
178-8066	•	•	•	•	Silicone Coated FEP	0.060 / 1.52	•	•	•	N/A	N/A	•	•	•
178-5789	•	•	•	•	•	•	•	•	•	Nomex®	TBD	•	•	•

**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. Nomex® is a registered trademark of DuPont.

• **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.**

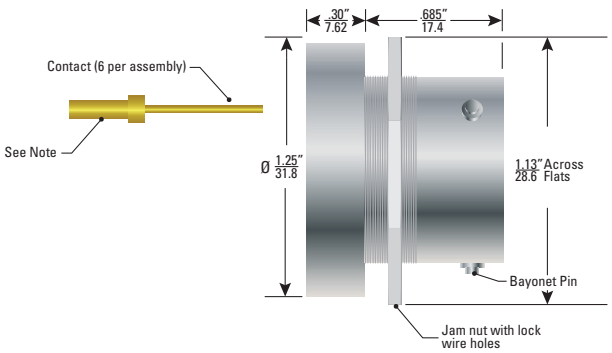
TY-RAP® is a registered trademark of Thomas & Betts (T & B) Corporation.

Magnum is a quality directed series of multi-pin, high voltage connectors and cable assemblies. The Magnum are mechanical assemblies built-up from pre-tested, detail components, as contrasted to a conventional, one piece, molded in-place cable assembly.

The Magnum construction allows the electrical and environment stress testing of details, such as plastic insulators and elastomeric dielectric interface seals, prior to final assembly. This results in a much higher level of quality and reliability. It is also possible, in many cases, to replace damaged receptacle seals and the individual plug leads rather than discarding an entire cable assembly.

RECEPTACLE

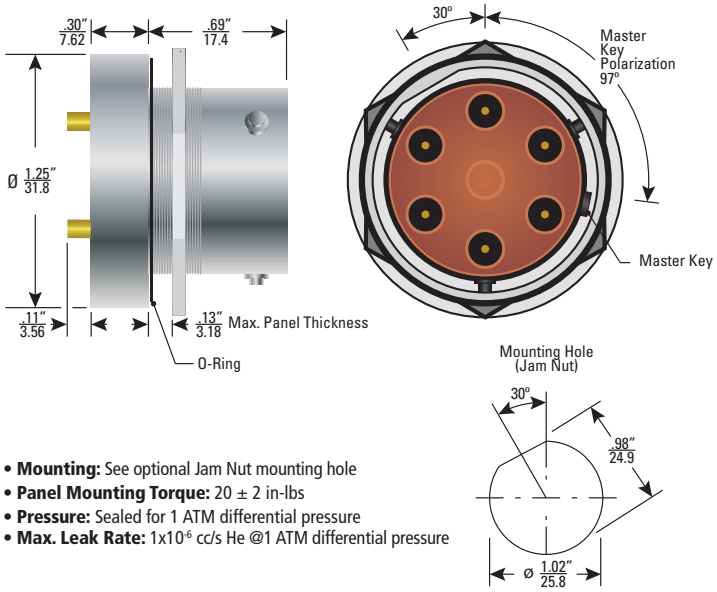
Rear, Jam Nut Mount
178-8960-1



- **Mounting:** See optional Jam Nut mounting hole
- **Panel Mounting Torque:** 20 ± 2 in-lbs
- Note: Contacts to be soldered to cable, inserted & bonded into insulator. Assembly instructions can be found at www.teledynereynolds.com or by contacting Teledyne Reynolds' Engineering.

	Polarization (Ref.)
178-8960-1	97° CW
178-8960-2	112° CW
178-8960-3	128° CW
178-8960-4	143° CW

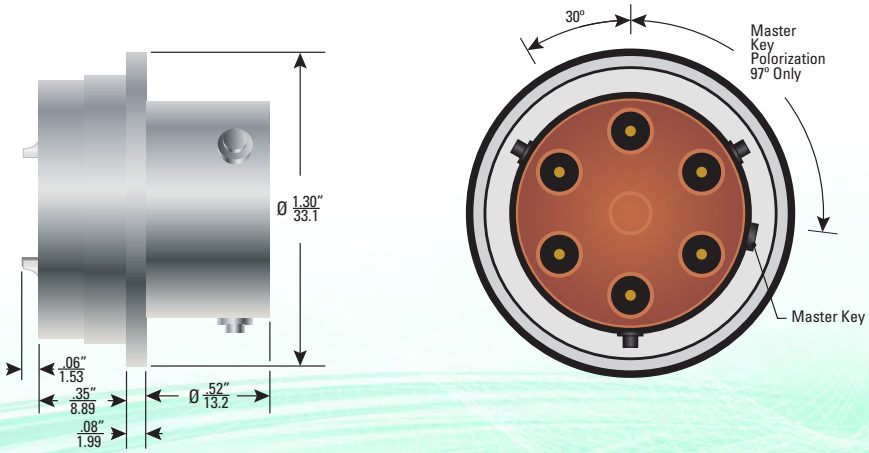
Sealed, Rear, Jam Nut Mount
178-8959-1



- **Mounting:** See optional Jam Nut mounting hole
- **Panel Mounting Torque:** 20 ± 2 in-lbs
- **Pressure:** Sealed for 1 ATM differential pressure
- **Max. Leak Rate:** $1x10^{-6}$ cc/s He @1 ATM differential pressure

	Polarization (Ref.)
178-8959-1	97° CW
178-8959-2	112° CW
178-8959-3	128° CW
178-8959-4	143° CW

Ceramic-to-metal, Brazed, Hermetic, Front Weld Mount
467-7040



- **Mounting:** Weld
- **Pressure:** Sealed for 1 ATM differential pressure
- **Max. Leak Rate:** $1x10^{-8}$ cc/s He @1 ATM differential pressure

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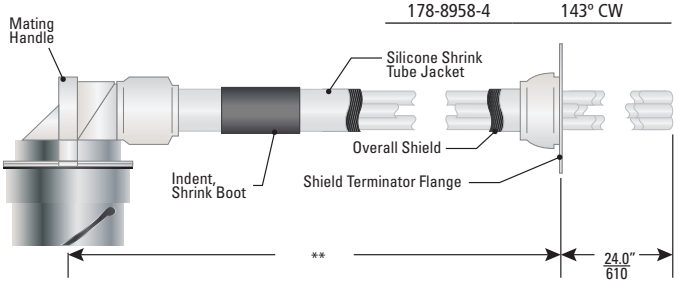
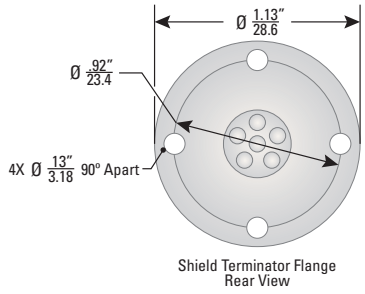
PLUG CABLE ASSEMBLIES

Shielded, Single-ended, Right Angle
178-8958-1

	Polarization (Ref.)
178-8958-1	97° CW
178-8958-2	112° CW
178-8958-3	128° CW
178-8958-4	143° CW

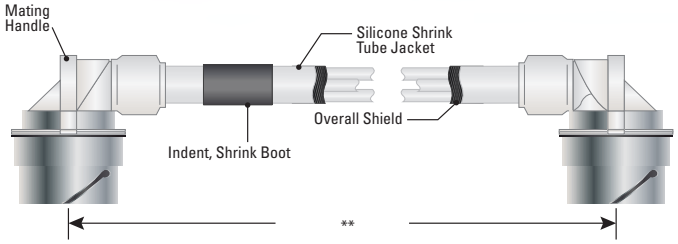




Shield Terminator Flange
Rear View

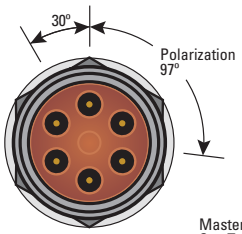
Shielded, Double-ended, Right Angle
178-9487-1

	Polarization (Ref.)
178-9487-1	97° CW
178-9487-2	112° CW
178-9487-3	128° CW
178-9487-4	143° CW

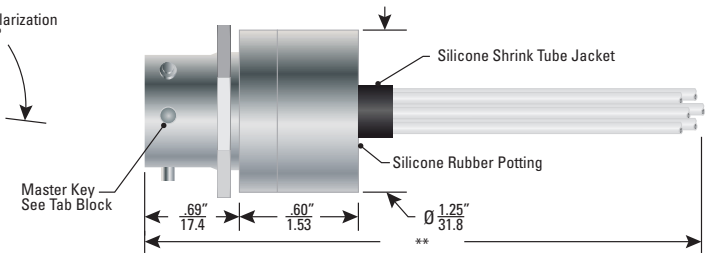


RECEPTACLE CABLE ASSEMBLIES

Rear, Jam Nut Mount
178-8970-1 Uses wire 178-8315

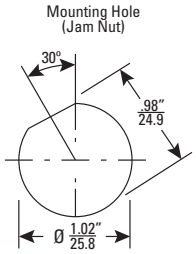


Front Face View



• **Mounting:** See optional Jam Nut mounting hole

	Polarization (Ref.)
178-8970-1	97° CW
178-8970-2	112° CW
178-8970-3	128° CW
178-8970-4	143° CW



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 (Socket)	Recept. Contact Material/Finish (Pin)	Wire Type	Wire Insulation	Braid Termination	Test Voltage @ 70,000 ft (kVDC)	Test Voltage @ Sea Level (kVDC)
Magnum	12	70,000	-55 to 125	6	Plastic	Plastic	Bayonet	CRES / Passivate	BeCu/Au with CRES hood	Brass/Au	Shielded	Silicone Coated FEP	Yes	18	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			
178-8315	22	20	19/32	SPC	FEP	.09 / 2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**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.** The Magnum Series is subject to the export jurisdiction of the U.S. Department of State and may require export license or other approval from the U.S. Department of State.