

<b>531 SL SERIES</b>	10 kVDC	SEA LEVEL	-40° TO 85°C
<b>531 SERIES</b>	15 kVDC	70,000 FT	
<b>521 SL SERIES</b>	20 kVDC	SEA LEVEL	
<b>521 SERIES</b>	25 kVDC	70,000 FT	

A series of shielded high voltage connectors, kits and cable assemblies designed to minimize the risk of electrical shock to personnel through the use of recessed contacts. Both the panel and cable connectors have recessed contacts and will stand off the rated voltage in the unmated condition.

**Note:** Voltage ratings apply in the mated condition only. Unmated 521 rated voltage is 20 kVDC and 531 is 10 kVDC.

### PLUG KITS

(Dimensions shown as in/mm)

**531 SL**  
**531**  
**521 SL**

"A" DIA.

B

SERIES	P/N	"A"	"B"	WIRE P/N
531 SL	167-3554	Ø.625 / 15.9	2.72 / 69.0	167-2669
531	167-4535	•	•	•
521 SL	167-3516	Ø.750 / 19.1	4.41 / 112	RG213/U
521	167-3516-1	•	•	RG214/U

**521: See Table Below**

Ø .750" / 19.1

4.41" / 112

521 P/N	WIRE P/N
167-4534	RG213/U
167-4534-1	RG214/U
167-4534-C	167-2669

### RECEPTACLES

(• = Same value as above)

#### Sealed, Front Mount

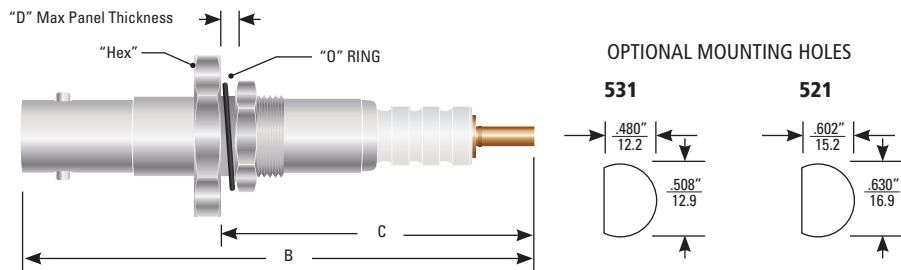
##### 531 167-3555

- **Mounting:** Allow clearance for 1/2"-28 UNEF thread
- **Panel Mounting Torque:** 42 to 48 in-lbs

##### 521 167-3517

- **Mounting:** Allow clearance for 5/8"-24 UNEF thread
- **Panel Mounting Torque:** 90 to 95 in-lbs

- **Pressure:** Sealed for 1 ATM differential pressure
- **Max Leakage:** 1x10<sup>-6</sup> cc/s He @ 1 ATM differential



SERIES	P/N	"HEX"	"B"	"C"	"D"
531	167-3555	.750 / 19.1	2.70 / 68.6	1.62 / 41.2	.312 / 7.92
521	167-3517	.930 / 23.6	3.94 / 100	2.56 / 65.0	.250 / 6.35

#### Sealed, Single-Ended Rear Mount, Cable Assembly

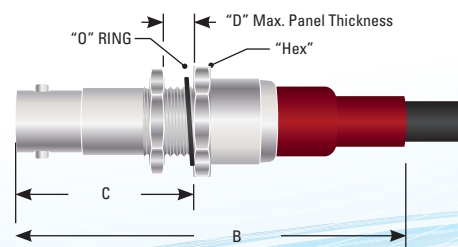
##### 531: 167-9096 Uses Wire 167-2669

- **Mounting:** Allow clearance for 1/2"-28 UNEF thread
- **Panel Mounting Torque:** 42 to 48 in-lbs

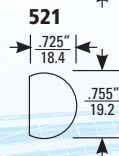
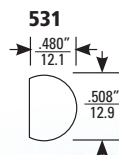
##### 521 167-9100 Uses Wire RG213/U

- **Mounting:** Allow clearance for 5/8"-24 UNEF thread
- **Panel Mounting Torque:** 90 to 95 in-lbs

- **Pressure:** Sealed for 1 ATM differential pressure
- **Max Leakage:** 1x10<sup>-6</sup> cc/s He @ 1 ATM differential



#### OPTIONAL MOUNTING HOLES



#### Sealed, Double-Ended, Front Mount Feedthrough

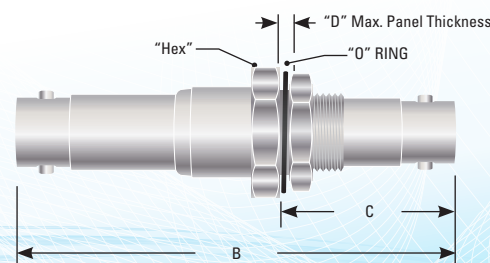
##### 531 167-3705

- **Mounting:** Allow clearance for 1/2"-28 UNEF thread
- **Panel Mounting Torque:** 42 to 48 in-lbs

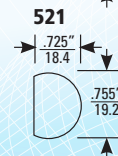
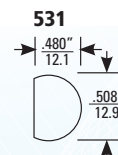
##### 521 167-3704

- **Mounting:** Allow clearance for 5/8"-24 UNEF thread
- **Panel Mounting Torque:** 90 to 95 in-lbs

- **Pressure:** Sealed for 1 ATM differential pressure
- **Max Leakage:** 1x10<sup>-6</sup> cc/s He @ 1 ATM differential



#### OPTIONAL MOUNTING HOLES



SERIES	P/N	"HEX"	"B"	"C"	"D"
531	167-9096	.750 / 19.1	2.88 / 73.0	1.270 / 32.3	.312 / 7.92
521	167-9100	1.06 / 27.0	4.00 / 102	2.08 / 52.8	.437 / 11.1

SERIES	P/N	"HEX"	"B"	"C"	"D"
531	167-3705	.750 / 19.1	3.13 / 79.5	1.27 / 32.3	.312 / 7.92
521	167-3704	1.06 / 27.0	4.75 / 121	2.08 / 52.8	.437 / 11.1

**\*\*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.

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<b>531 SERIES</b>	15 kVDC	70,000 FT
<b>521 SL SERIES</b>	20 kVDC	SEA LEVEL
<b>521 SERIES</b>	25 kVDC	70,000 FT

-40° TO 85°C

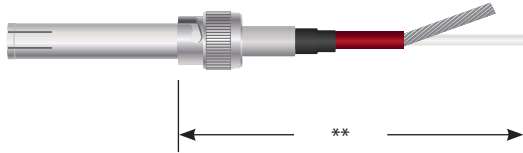
### 531 SL AND 531 CABLE ASSEMBLIES

#### Single-Ended, Shielded, Pigtail

531 SL: **167-4451**

531: **167-9003**

- Uses Wire **167-2669**

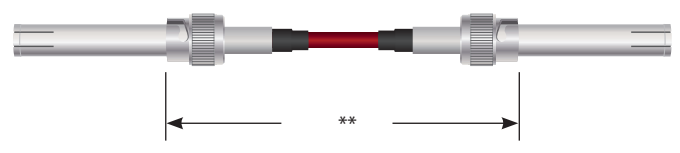


#### Double-Ended, Shielded

531 SL: **167-3648**

531: **167-4561**

- Uses Wire **167-2669**

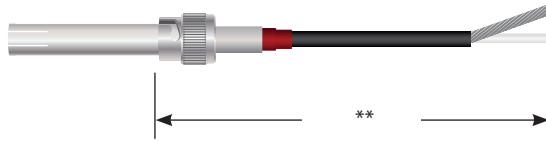


### 521 SL CABLE ASSEMBLIES

#### Single-Ended, Shielded, Pigtail

167-4450-1

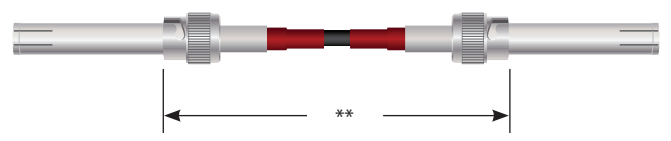
- Uses Wire **RG213/U**



#### Double-Ended, Shielded

167-3638-1

- Uses Wire **RG213/U**



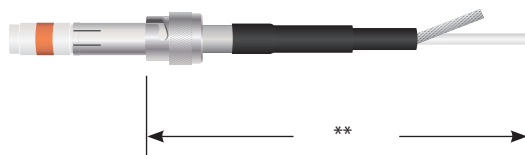
SINGLE-ENDED	DOUBLE-ENDED	WIRE P/N
167-4450-4	167-3638-4	RG214/U

### 521 CABLE ASSEMBLIES

#### Single-Ended, Shielded, Pigtail

167-4596-1

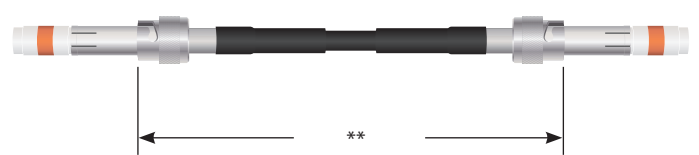
- Uses Wire **RG213/U**



#### Double-Ended, Shielded

167-4569-1

- Uses Wire **RG213/U**



SINGLE-ENDED	DOUBLE-ENDED	WIRE P/N
167-4596-4	167-4569-4	RG214/U
178-6404*	178-9879*	167-2669

\*Not shown

### 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	Test Voltage @ Sea Level
<b>531 SL</b>	10	Sea Level	-40 to 85	10	Plastic	Plastic	Bayonet	Brass/Ni	BeCu/Au	Brass/Au	Shielded	PE	Crimp	N/A	13
<b>531</b>	15	70,000	•	•	•	•	•	•	•	•	•	•	•	31	N/A
<b>521 SL</b>	20	Sea Level	•	20	•	•	•	•	•	•	•	•	•	N/A	28
<b>521</b>	25	70,000	•	•	•	•	•	•	•	•	•	•	•	41	N/A

### WIRE SPECIFICATIONS

Part #	Operating Voltage (kVDC)	Conductor			Insulation		Shielding			Jacket		Impedance Ω	Attenuation dB/100 ft @ 400mhz	Capacitance pF/FT (Nom.) @1k HZ
		AWG	Strands	Plating	Material	σ in./mm	AWG	Plating	σ in./mm	Material	σ in./mm			
<b>167-2669</b>	20	16	19/29	TPC	Silicone	.118 / 3.00	36	TPC	.150 / 3.81	PE	.195 / 4.95	31	16	48