



**HVID**  
Series

# High Voltage Inline Disconnects

17 to 60 KVDC  
For Ground Level Applications

## General Specifications

### High Voltage Inline Disconnect Series\*

These In-line Disconnects use Push-on, Pull-off friction mating of the two silicone rubber halves to achieve corona resistant high voltage performance.

The Disconnects are available as single-ended pre-tested assemblies. Kits containing an insulator and a contact are available for field installation. Assembly of these kits requires the use of RTV silicone adhesive.

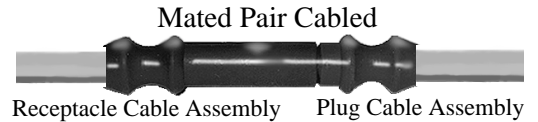
High Voltage In-line Disconnects are used in ground level applications for:

- Electronic Countermeasure Systems
- Travelling Wave Tube Connections
- Lasers
- High Voltage Power Supplies
- CRT Displays

### Interface cleaning

High voltage connectors must always be cleaned prior to mating. The proper cleaning method is to wipe or spray the interface area with isopropyl alcohol and immediately blow an inert gas such as dry nitrogen over the interface area until dry. No other cleaning method should be attempted.

**WARNING:** These connectors should **NEVER** be handled, mated or unmated when voltage is applied.



See pp. 14 & 15 for Kit ordering information and cable diameter.  
See p. 44 for Kit assembly instructions. See p. 40 for cable specifications.

## GENERAL SPECIFICATION

Voltage rating (mated)

Altitude rating

Operating temperature range

Insulator/body material

Contact type

Contact material/finish

Wire type

Kit contents

100% Voltage test @ sea level & ambient temperature:

17 KVDC Version

45 KVDC Version

60 KVDC Version

### Plug Disconnect

**17 to 60 KVDC**

**To 15,000 ft.**

**-40°C to +85°C**

**Silicone rubber**

**Female**

**Copper alloy/Gold plate**

**Silicone rubber**

**Insulator & female contact**

**25 KVDC**

**60 KVDC**

**70 KVDC**

### Receptacle Disconnect

**17 to 60 KVDC**

**To 15,000 ft.**

**-40°C to +85°C**

**Silicone rubber**

**Male**

**Brass/Gold plate**

**Silicone rubber**

**Insulator & male contact**

**25 KVDC**

**60 KVDC**

**70 KVDC**

Cable Assembly  
Length vs Manufacturing  
Tolerance Chart

**Length: feet/M**  
7.5/2.28 or less  
7.5/2.2 to 12.5/3.8  
12.5/3.8 to 22.5/6.8  
22.5/6.8 to 35/10.6  
35/10.6 to 50/15.2  
50/15.2 to 70/21.3  
70/21.3 to 100/30.4

**Tolerance: inches/mm**  
0.25/6.3  
1.0/25.4  
1.50/38.1  
2.0/50.8  
3.0/76.2  
4.0/101.6  
5.0/127

\* Reynolds Industries, Inc. acquired the In-line Disconnect (HVID) product line from Rowe Industries, Inc. in 1997.



**HVID**  
Series

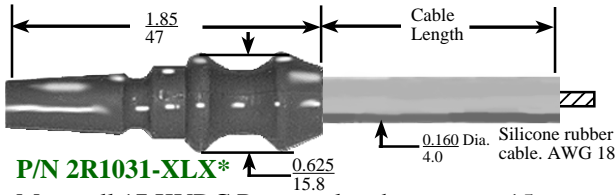
**17 to 60 KVDC**

Ground Level  
Military/Industrial Applications  
**Operating Temperature:**  
-40°C to +85°C

**Plug Inline Disconnect Cable Assemblies and Kits**

**17 to 60 KVDC Rated**

**17 KVDC Inline Disconnect (Plug) Cable Assembly**

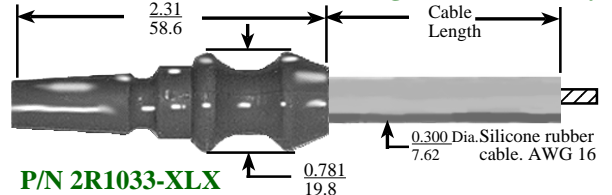


**P/N 2R1031-XLX\***  
Mates all 17 KVDC Receptacles shown on p. 15

Mating Style: Push-On/Pull-Off  
Operating temperature range: -40°C to +85°C  
Assembly: All cable assemblies have the silicone rubber insulator molded to a custom length of silicone wire.  
Kits: Kits containing a molded housing (insulator) and one contact (female) are available for field installation. Wire is not included but may be purchased from Reynolds. A suitable RTV silicone adhesive is required for field assembly. Kits are shown below. Order by using the applicable part number. Kit assembly instructions are shown on p. 44. For bulk cable, see p. 40.

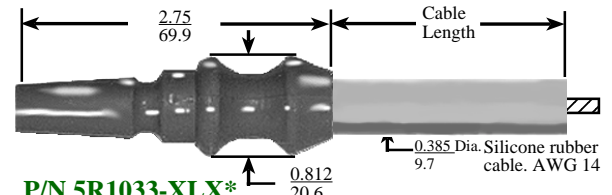
 <b>17 KVDC Kit</b> <b>P/N 2R1031</b> uses .160/4.0 silicone cable <b>P/N R790-2518</b>	 <b>45 KVDC Kit</b> <b>P/N 2R1033</b> uses .300/7.6 silicone cable <b>P/N R790-4516</b>	 <b>60 KVDC Kit</b> <b>P/N 5R1033</b> uses .385/9.7 silicone cable <b>P/N R790-6014</b>
---	---	---

**45 KVDC Inline Disconnect (Plug) Cable Assembly**



**P/N 2R1033-XLX**  
Mates all 45 KVDC Receptacles shown on p. 15

**60 KVDC Inline Disconnect (Plug) Cable Assembly**

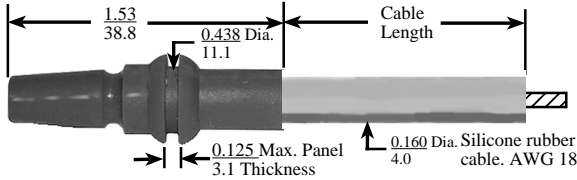


**P/N 5R1033-XLX\***  
Mates all 60 KVDC Receptacles shown on p. 15

**Plug Panel Mount Disconnect Cable Assemblies and Kits**

**17 to 60 KVDC Rated**

**17 KVDC Panel Mount (Plug) Cable Assembly**

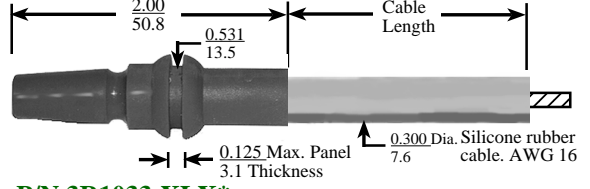


**P/N R1031-XLX\***  
Mates all 17 KVDC Receptacles shown on p. 15

Mating Style: Push-on/Pull-Off  
Mounting: Grommet  
Operating temperature range: -40°C to +85°C  
Assembly: All cable assemblies have the silicone rubber insulator molded to a custom length of silicone wire.  
Kits: Kits containing a molded housing (insulator) and one contact (female) are available for field installation. Wire is not included but may be purchased from Reynolds. A suitable RTV silicone adhesive is required for field assembly. Kits are shown below. Order by using the applicable part number. Kit assembly instructions are shown on p. 44. For bulk cable, see p. 40.

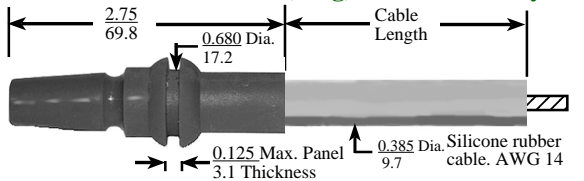
 <b>17 KVDC Kit</b> <b>P/N R1031</b> uses .160/4.0 silicone cable <b>P/N R790-2518</b>	 <b>45 KVDC Kit</b> <b>P/N R1033</b> uses .300/7.6 silicone cable <b>P/N R790-4516</b>	 <b>60 KVDC Kit</b> <b>P/N 6R1033</b> uses .385/9.7 silicone cable <b>P/N R790-6014</b>
--	--	---

**45 KVDC Panel Mount (Plug) Cable Assembly**



**P/N 3R1033-XLX\***  
Mates all 45 KVDC Receptacles shown on p. 15

**60 KVDC Panel Mount (Plug) Cable Assembly**



**P/N 6R1033-XLX\***  
Mates all 60 KVDC Receptacles shown on p. 15

**Ordering Cable Assemblies**

\*Use -XLX to specify cable assembly length.  
X=feet L X= inches. Example: **4L6** is 4 feet, 6 inches

**Ordering Kits**

Use the applicable part number



**HVID**  
Series

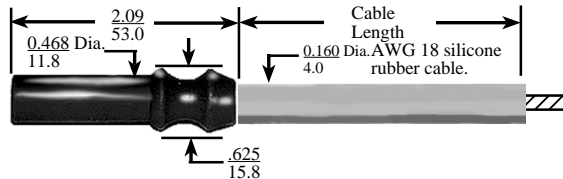
**17 to 60 KVDC**

Ground Level  
Military/Industrial Applications  
**Operating Temperature:**  
-40°C to +85°C

**Receptacle Inline Disconnect Cable Assemblies & Kits**

**17 to 60 KVDC Rated**

**17 KVDC Inline Disconnect (Recept.) Cable Assembly**



**P/N 2R1030-XLX\***

Mates all 17 KVDC Plugs shown on p. 14

Mating Style: Push-on/Pull-Off

Operating temperature range: -40°C to +85°C.

Assembly: All cable assemblies have the silicone rubber insulator molded to a custom length of silicone wire.

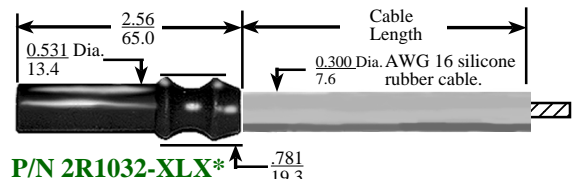
Kits: Kits containing a molded housing (insulator) and one contact (male) are available for field installation. Wire is not included but may be purchased from Reynolds. A suitable RTV silicone adhesive is required for field assembly.

Kits are shown below. Order by using the appropriate part number.

Kit assembly instructions are shown on p. 44. For bulk cable, see p. 40

17 KVDC Kit <b>P/N 2R1030</b> uses .160/4.0 silicone cable <b>P/N R790-2518</b>	45 KVDC Kit <b>P/N 2R1032</b> uses .300/7.6 silicone cable <b>P/N R790-4516</b>	60 KVDC Kit <b>P/N 4R1032</b> uses .385/9.7 silicone cable <b>P/N R790-6014</b>

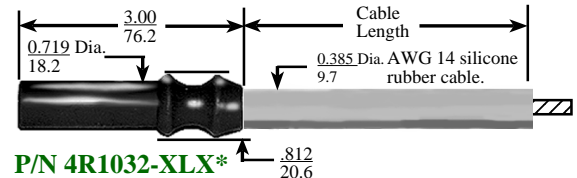
**45 KVDC Inline Disconnect Recept. Cable Assembly**



**P/N 2R1032-XLX\***

Mates all 45 KVDC Plugs shown on p. 14

**60 KVDC Inline Disconnect Recept. Cable Assembly**



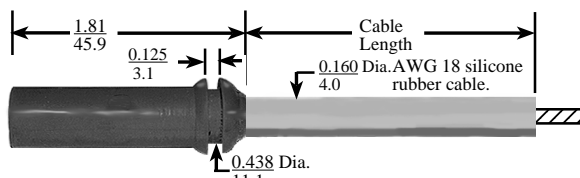
**P/N 4R1032-XLX\***

Mates all 60 KVDC Plugs shown on p. 14

**Receptacle Panel Mount Disconnect Cable Assemblies & Kits**

**17 to 60 KVDC Rated**

**17 KVDC Panel Mount (Recept.) Cable Assembly**



**P/N R1030-XLX\***

Mates all 17 KVDC Plugs shown on p. 14

Mating Style: Push-on/Pull-Off

Mounting: Grommet

Operating temperature range: -40°C to +85°C.

Assembly: All cable assemblies have the silicone rubber insulator molded to a custom length of silicone wire.

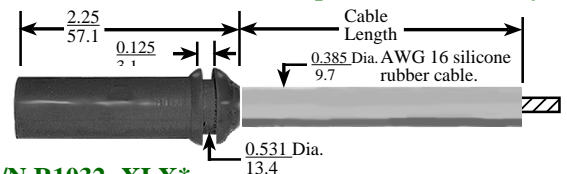
Kits: Kits containing a molded housing (insulator) and one contact (male) are available for field installation. Wire is not included but may be purchased from Reynolds. A suitable RTV silicone adhesive is required for field assembly.

Kits are shown below. Order by using the appropriate part number.

Kit assembly instructions are shown on p. 44. For bulk cable, see p. 40

17 KVDC Kit <b>P/N R1030</b> uses .160/4.0 silicone cable <b>P/N 790-2518</b>	45 KVDC Kit <b>P/N R1032</b> uses .300/7.6 silicone cable <b>P/N R790-4516</b>	60 KVDC Kit <b>P/N 5R1032</b> uses .385/9.7 silicone cable <b>P/N R790-6014</b>

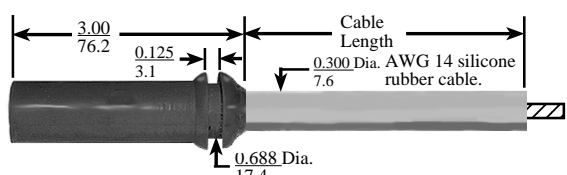
**45 KVDC Panel Mount (Recept.) Cable Assembly**



**P/N R1032-XLX\***

Mates all 45 KVDC Plugs shown on p. 14

**60 KVDC Panel Mount (Recept.) Cable Assembly**



**P/N 5R1032-XLX\***

Mates all 60 KVDC plugs shown on p. 14

**\*Ordering Cable Assemblies**

Use - X L X to specify assembly length.

X = ft. L X = inches. Example: **-4L6** is 4 feet, 6 inches

**Ordering Kits**

Use the applicable part number