

HIGH VOLTAGE INTERCONNECT



Amphenol
Alden

ABOUT OUR COMPANY

Amphenol is the world's leading interconnect technology company with more than 80 business units around the globe. Amphenol Alden, an operating unit of Amphenol, was founded in 1929 as Alden Products Company and has a strong legacy in High Voltage products and services. With factories in China, Mexico, and in our Massachusetts headquarters location, Amphenol Alden meets the varying demands of its worldwide customers.

This catalog showcases the Amphenol Alden line of standard high voltage connectors that helped shape the high voltage interconnect industry. In addition to these standard products, our experienced high voltage design engineers collaborate with customers to develop custom solutions and engineered cable assemblies that solve the most demanding high voltage challenges. Throughout our 70 years of high voltage leadership we have served a diverse range of customers in the complex and competitive medical, industrial and military markets and have developed industry standard connectors for X-Ray, ESD, HeNe lasers and more.

At Amphenol Alden, a spirit of collaboration extends from the design process through to final delivery. Utilizing dedicated internal quality and supply chain management teams, Amphenol Alden provides unsurpassed service before, during, and after the sale. This collaborative structure ensures Amphenol Alden is a true partner in solving your most difficult product challenges, whether using standard products or fully customized solutions.

MARKETS SERVED



Imaging
Medical X-ray
Security Detection
CT Scanners



Industrial
Laser
HV Test Equipment
ESD simulators



Military/Aerospace
Missile Ignition
HUD's
Navigation



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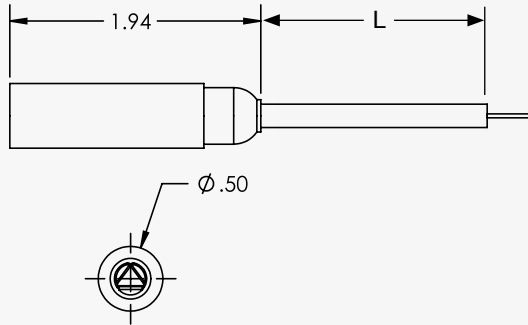
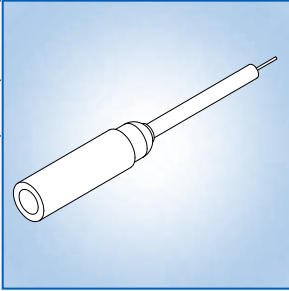
A-SERIES

The A-Series of high voltage connectors are small, lightweight, and come in a variety of configurations. This high performing connector series perfectly handles the varying demands of high voltage test equipment, ionizers, ESD simulators and many other end uses.

A100QX"L"

Single Circuit In-Line Receptacle

Up to **15** kVDC



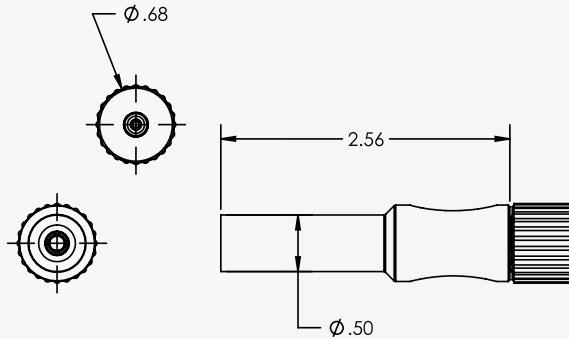
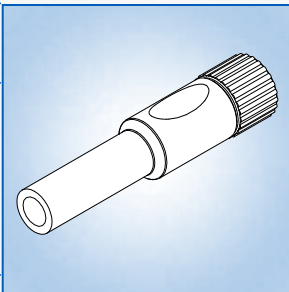
A109

Field Installable Single Circuit In-Line Receptacle

Available in Panel Mount and Multiple Diameters to Accommodate Different Wire Sizes. Consult Factory for Additional Details.

Molded in Black Polybutylene Terephthalate

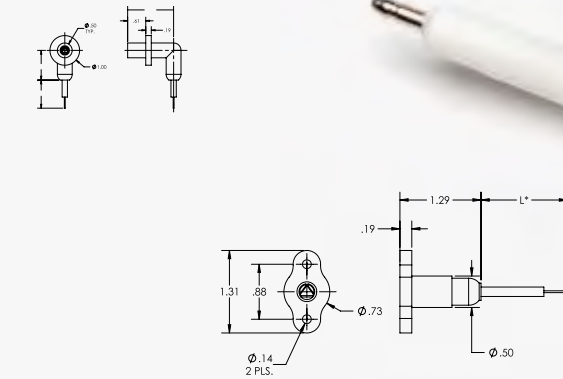
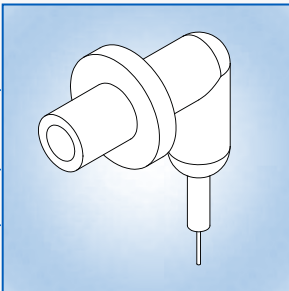
Up to **20** kVDC



A200QX"L"

90 deg: Single Circuit Flanged Receptacle

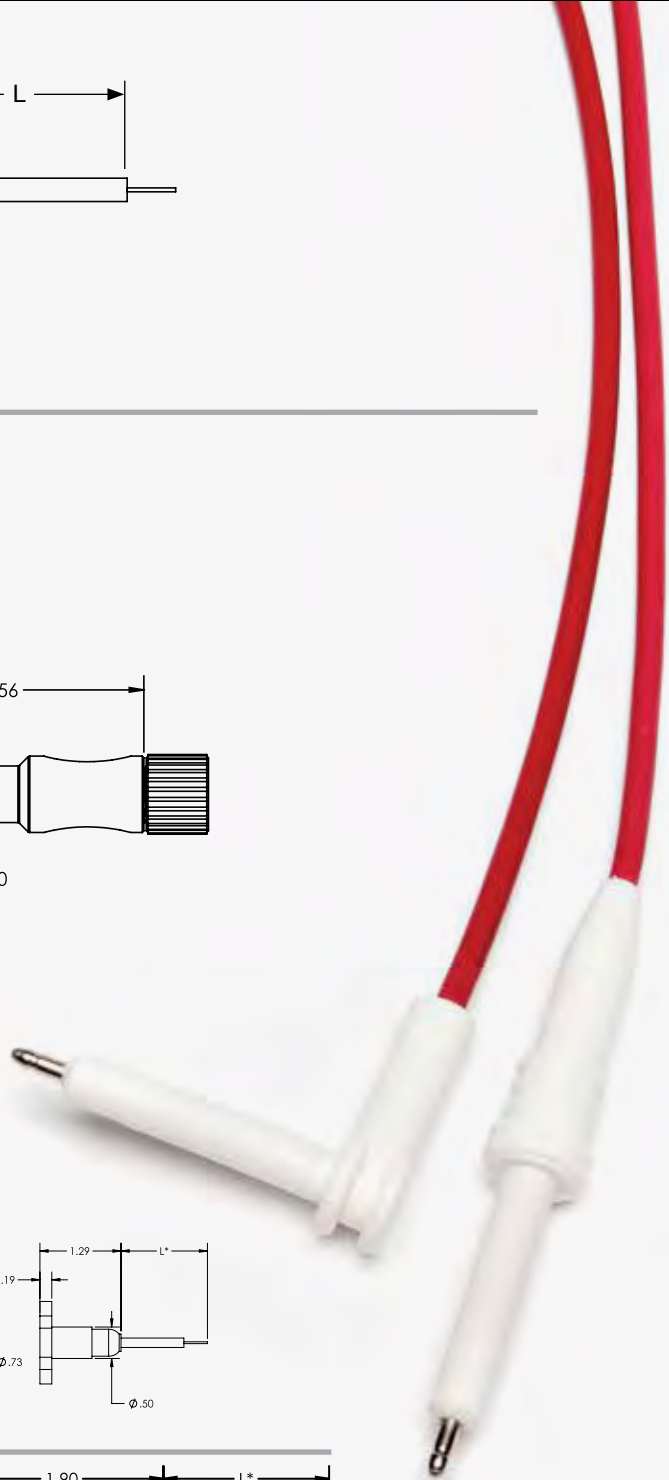
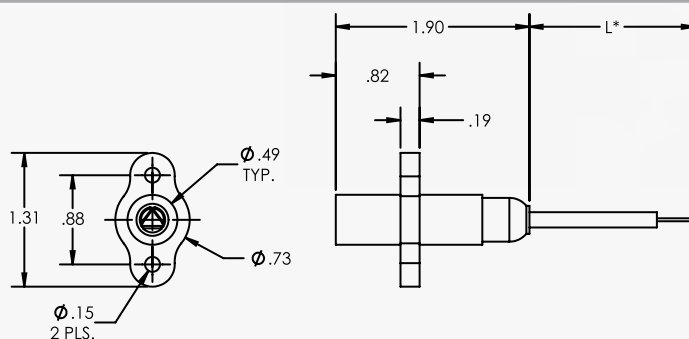
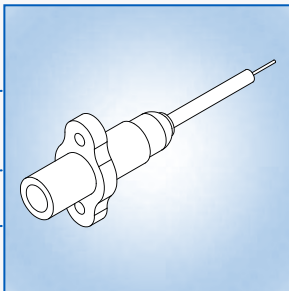
Up to **20** kVDC



A400QX"L"

Single Circuit Panel Mount Receptacle

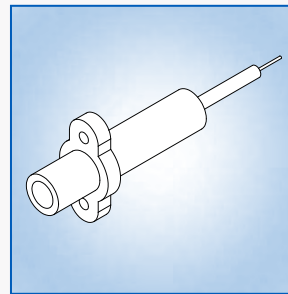
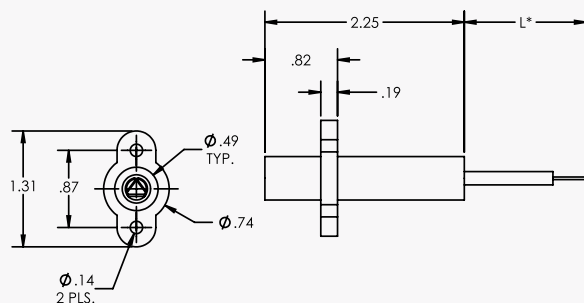
Up to **15** kVDC



A401QX"L"

Single Circuit Panel Mount Receptacle

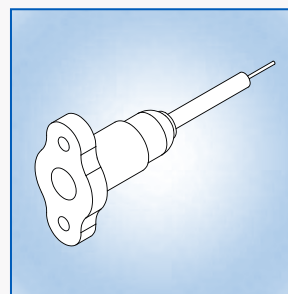
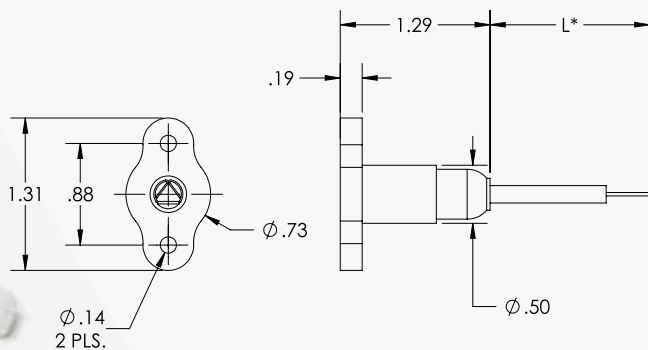
Up to 25 kVDC



A406QX"L"

Single Circuit Flush Profile Panel Mount Receptacle

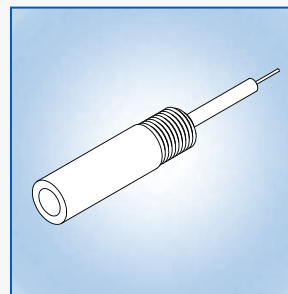
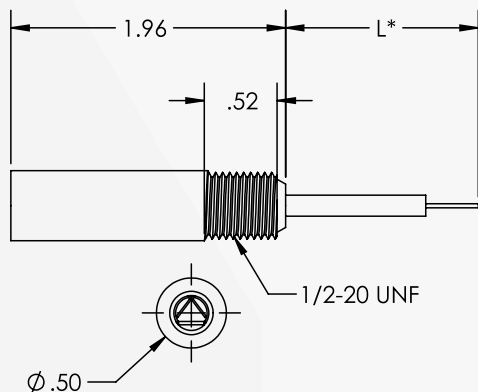
Up to 15 kVDC



A408QX"L"

Single Circuit In-Line Receptacle with Threaded Back

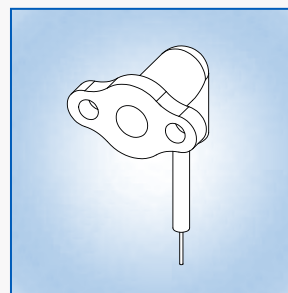
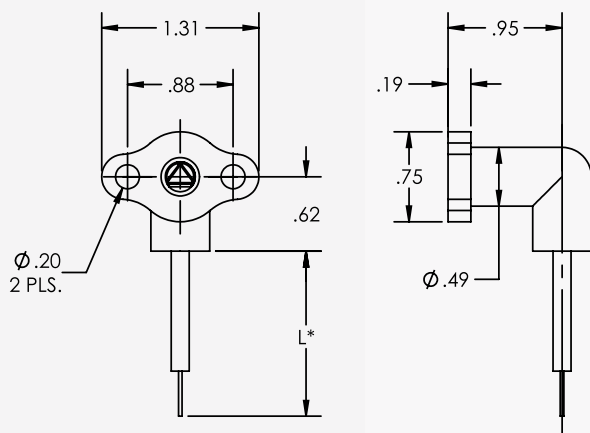
Up to 20 kVDC



A500QX"L"

90 deg: Single Circuit Flush Profile Panel Mount Receptacle

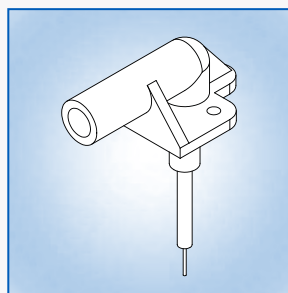
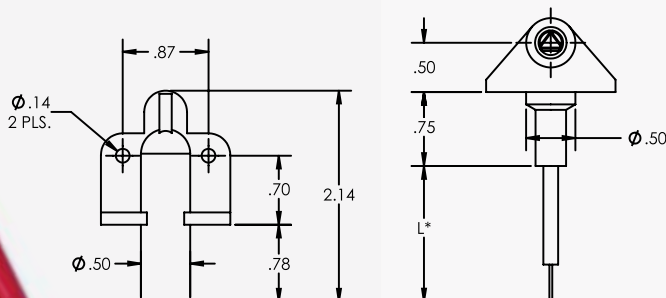
Up to 10 kVDC



A501QX"L"

90 deg: Low Profile Panel Mount Receptacle

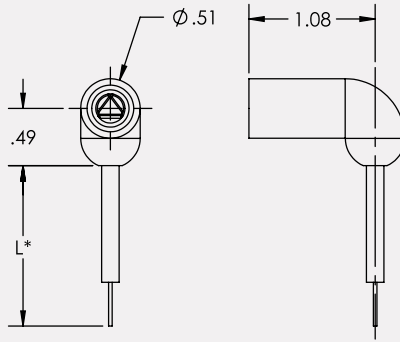
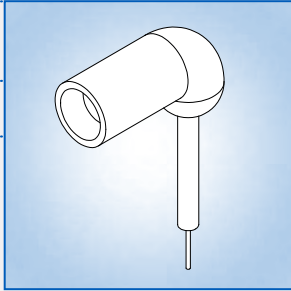
Up to 25 kVDC



A504QX"L"

90 deg: Compact In-Line Receptacle

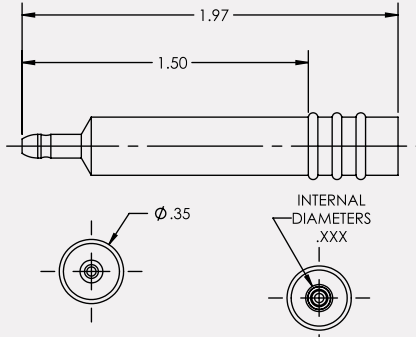
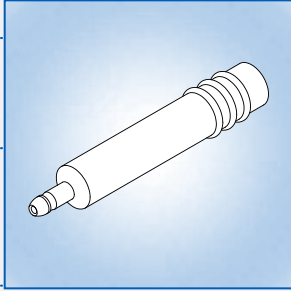
Up to 15 kVDC



A000.XXX

Field Installable Single Circuit In-Line Solder-On Plug

XXX = I.D.'s of 0.140"
0.165"
0.187"
0.200

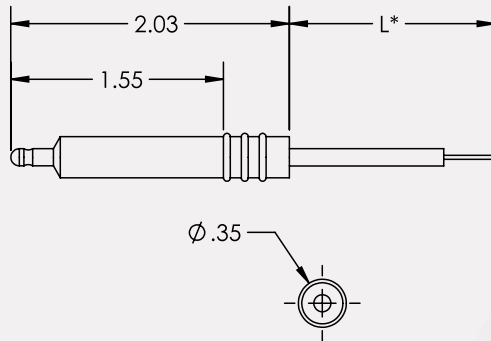
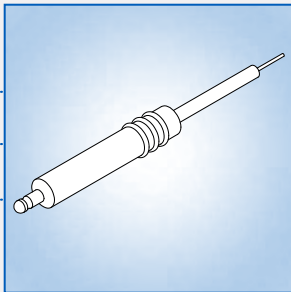


Up to 25 kVDC

A600QX"L"

In-Line Single Circuit Plug

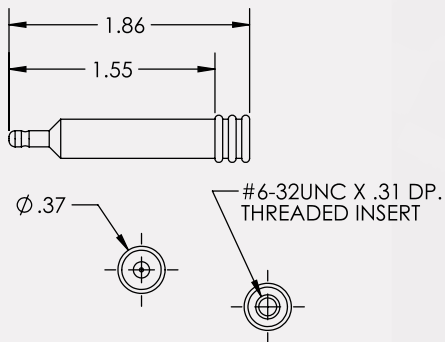
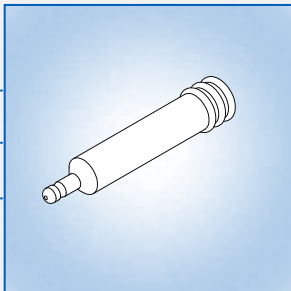
Up to 25 kVDC



A601

Stud Mount Plug

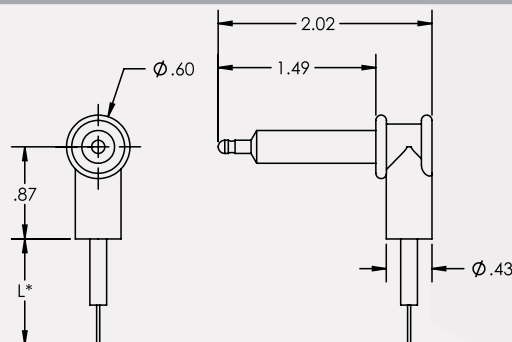
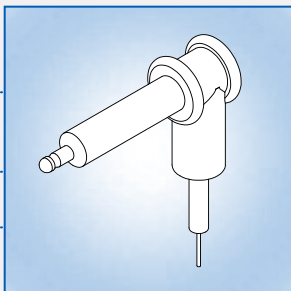
Up to 25 kVDC

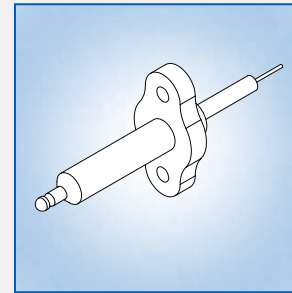
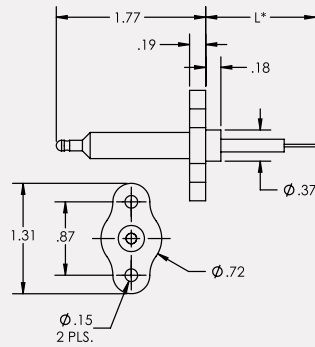


A700QX"L"

90 deg: In-Line Single Circuit Plug

Up to 25 kVDC

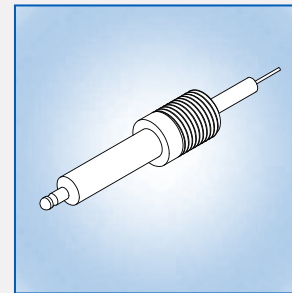
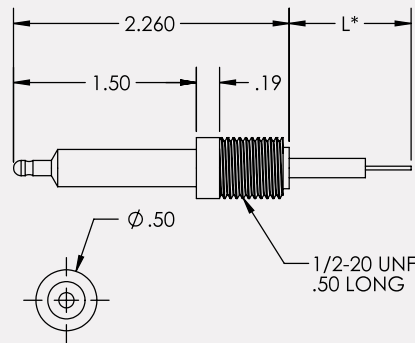




A800QX"L"

Panel Mount Plug

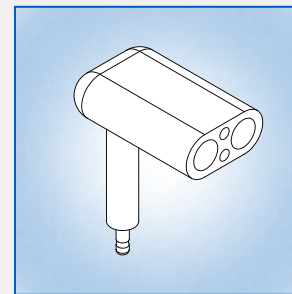
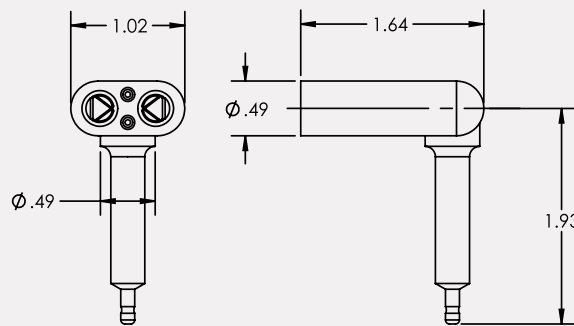
Up to 25 kVDC



A801QX"L"

In-line Threaded Plug
with Threaded Back

Up to 25 kVDC



A900

90 Deg: Dual HV Splitter
Adapter (2 Receptacles to
Single Plug)

Up to 20 kVDC

Unless otherwise specified:

- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (A100QX"L" with 48 inches of wire is ordered as A100QX48)
- "QX" in the part number is the wire type. It is 22AWG, 30 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, color red
- Connector bodies are molded in flame-retardant polypropylene, color white
- Voltage ratings are DC voltages, continuous operation when properly mated
- All A Series plugs will mate with all A Series receptacles
- All dimensions are in inches

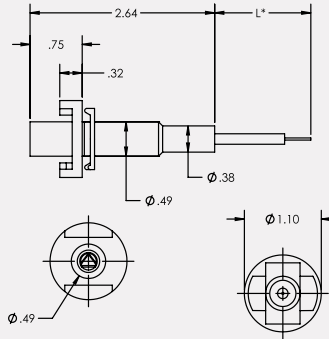
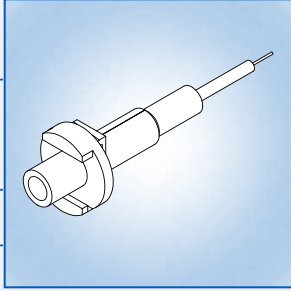
B-SERIES

The B-Series is a compact single pole high voltage connector system capable of operating as high as 40 kVDC. The quarter turn locking system ensures that the plug and receptacle remain properly mated during operation. There are a variety of receptacle mounting options including an oil-tight feed-through for use in transformer oil.

B100RX"L"

Quick-Lock Panel Mount
Single Circuit In-line
Receptacle

Up to **35** kVDC

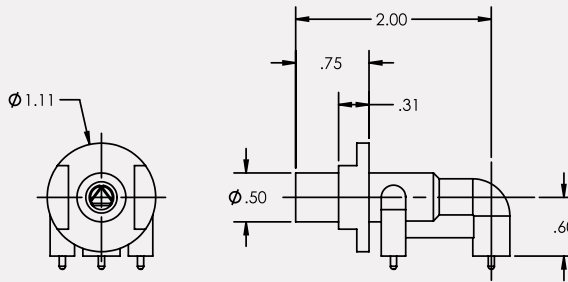
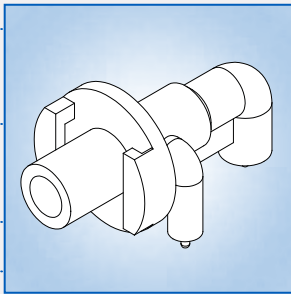


B101

Quick-Lock Single Circuit
PC Board Mounting
Receptacle

Through Circuit to Rear
Pin - 2 Pins Up Front for
Soldering to Board

Up to **40** kVDC



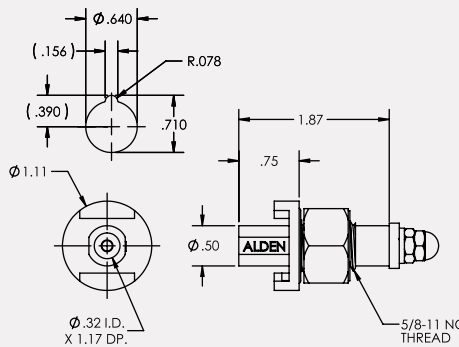
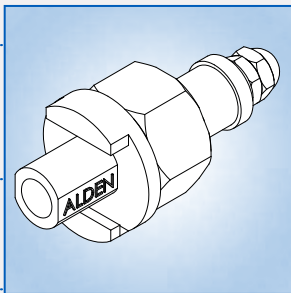
B102

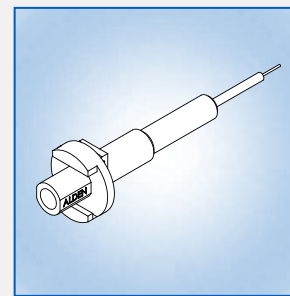
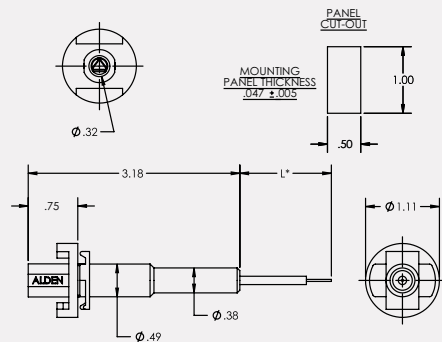
Quick-Lock Single Circuit
Oil-Tight Feed-Through
Threaded Panel Mount
Receptacle

Includes Panel Mounting
Nut and Cap Nut for Wire
Retention

Molded in PET

Up to **40** kVDC



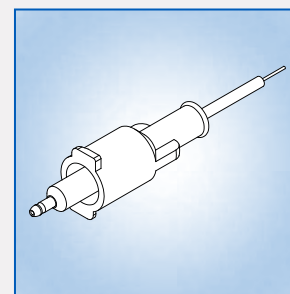
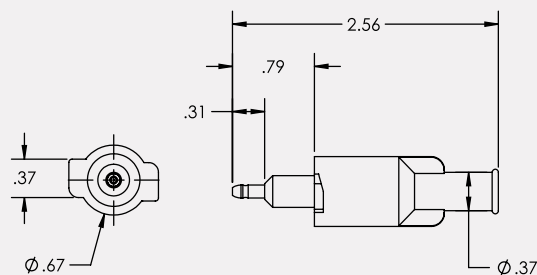


B110RX"L"

Quick-Lock Panel
Mount Single Circuit
In-line Receptacle

Extended Length

Up to **40** kVDC

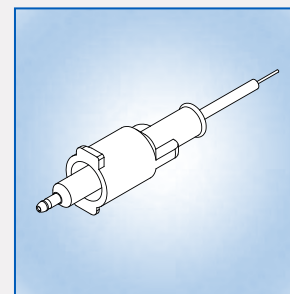
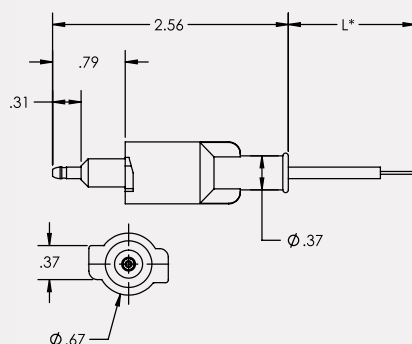


B200.XXX

Quick-Lock Field
Installable In-Line Plug

XXX = I.D's of: 0.125"
0.156"
0.250"

Up to **40** kVDC



B200RX"L"

Quick-Lock In-Line Plug

Up to **40** kVDC

Unless otherwise specified:

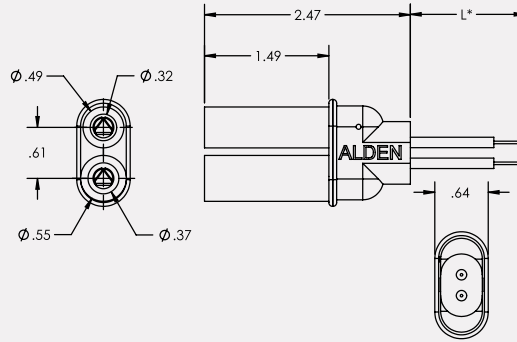
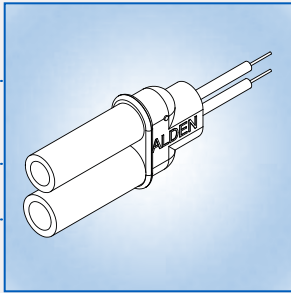
- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (B100RX"L" with 48 inches of wire is ordered as B100RX48)
- "RX" in the part number is the wire type. It is 22AWG, 40 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, color red
- Connector bodies are molded in flame-retardant polypropylene, color white
- Voltage ratings are DC voltages, continuous operation when properly mated
- All B Series plugs will mate with all B Series receptacles
- All dimensions are in inches

D-SERIES

The D-Series of high voltage connectors, rated to operate up to 15 kVDC, allows for double circuit polarized configurations used in high voltage feed and return devices. These connectors are the industry standard for Helium Neon Lasers and are popular in other high voltage applications as well.

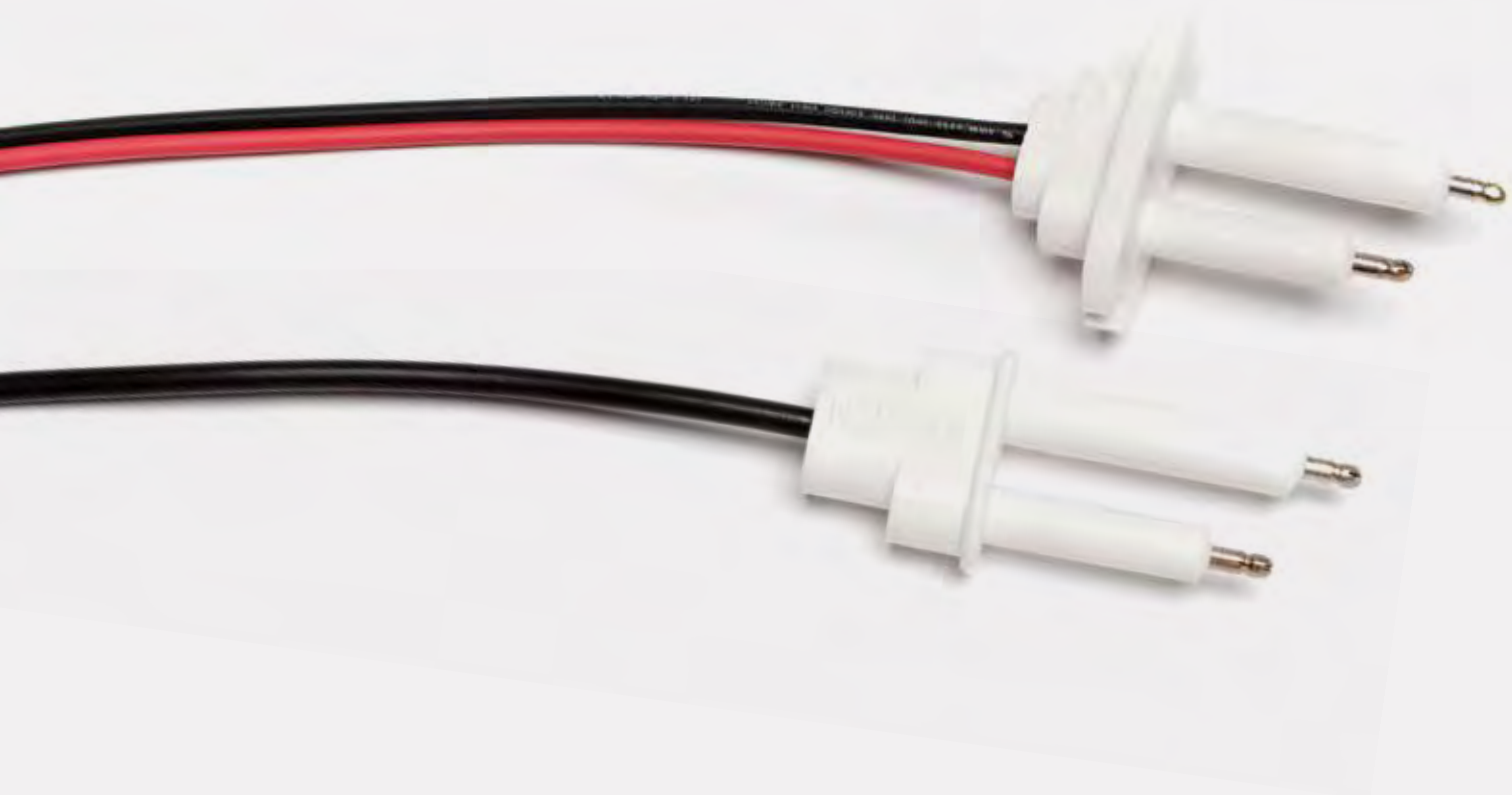
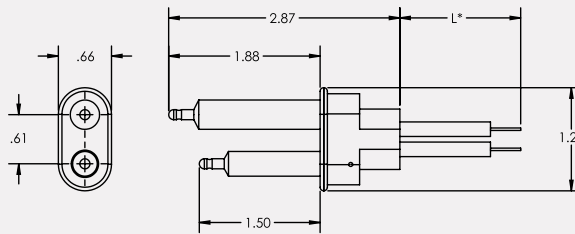
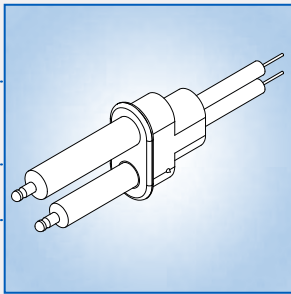
D100FY"L"

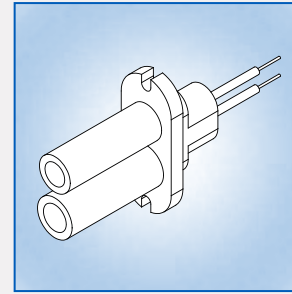
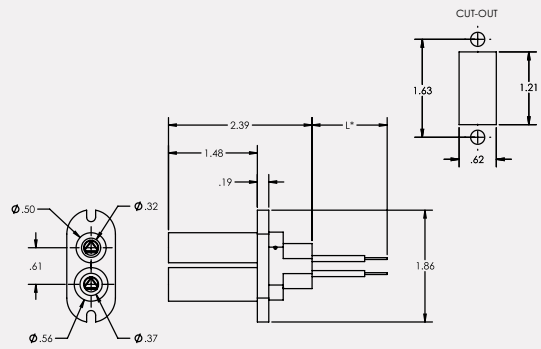
Double Circuit Polarized
In-Line Receptacle
Up to 15 kVDC



D200FY"L"

Double Circuit Polarized
In-Line Plug
Up to 15 kVDC

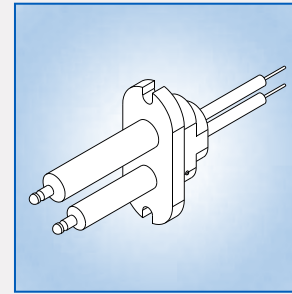
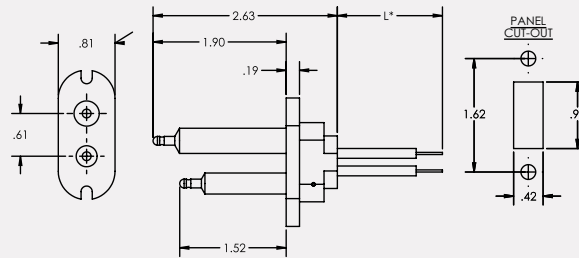




D300FY"L"

Double Circuit Polarized
Panel Mount
Receptacle

Up to **15** kVDC



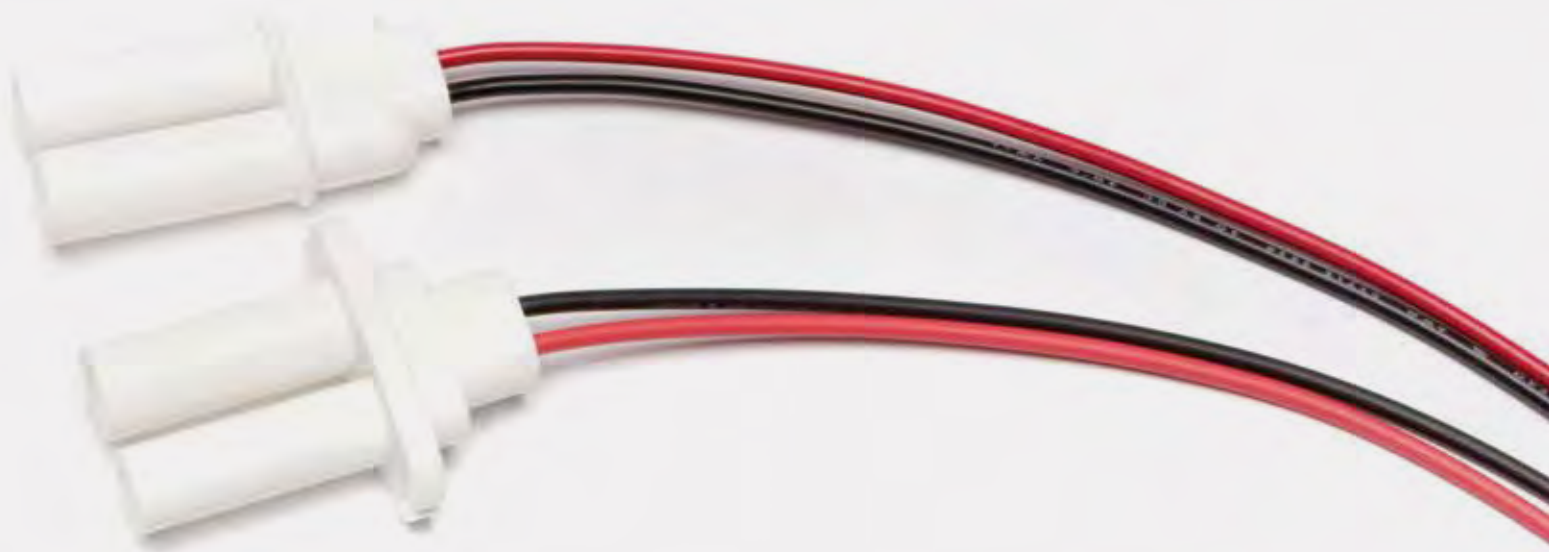
D400FY"L"

Double Circuit Polarized
Panel Mount
Plug

Up to **15** kVDC

Unless otherwise specified:

- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (D100FY"L" with 48 inches of wire is ordered as D100FY48)
- "FY" in the part number is the wire type which is 22AWG, 15 kVDC rated, UL 3239 style twin lead wire made with cross-linked polyethylene insulation, and PVC jacket, color red (small side) and black (large side)
- Optional "VX" in the part number is the wire type which is 22AWG, 15 kVDC rated shielded and jacketed lead wire made with cross-linked polyethylene insulation, color black (small side) with shield terminated to the larger side (not shown)
- Connector bodies are molded in flame-retardant polypropylene, color white
- Voltage ratings are DC voltages, continuous operation when properly mated
- All D Series plugs will mate with all D Series receptacles
- All dimensions are in inches



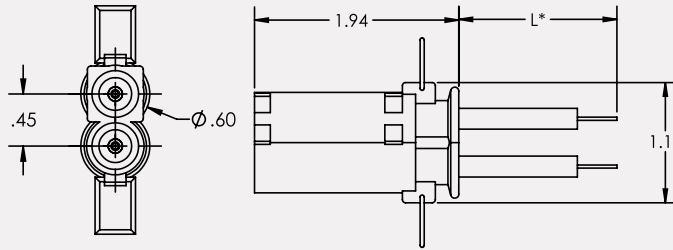
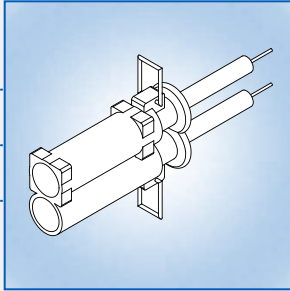
E-SERIES

The E-Series family of two and three circuit polarized connectors brings simplicity to multi-pin high voltage applications. A unique wire latch system provides an added level of safety and security to the high voltage system.

E200QX"L"

Two Circuit Polarized Plug

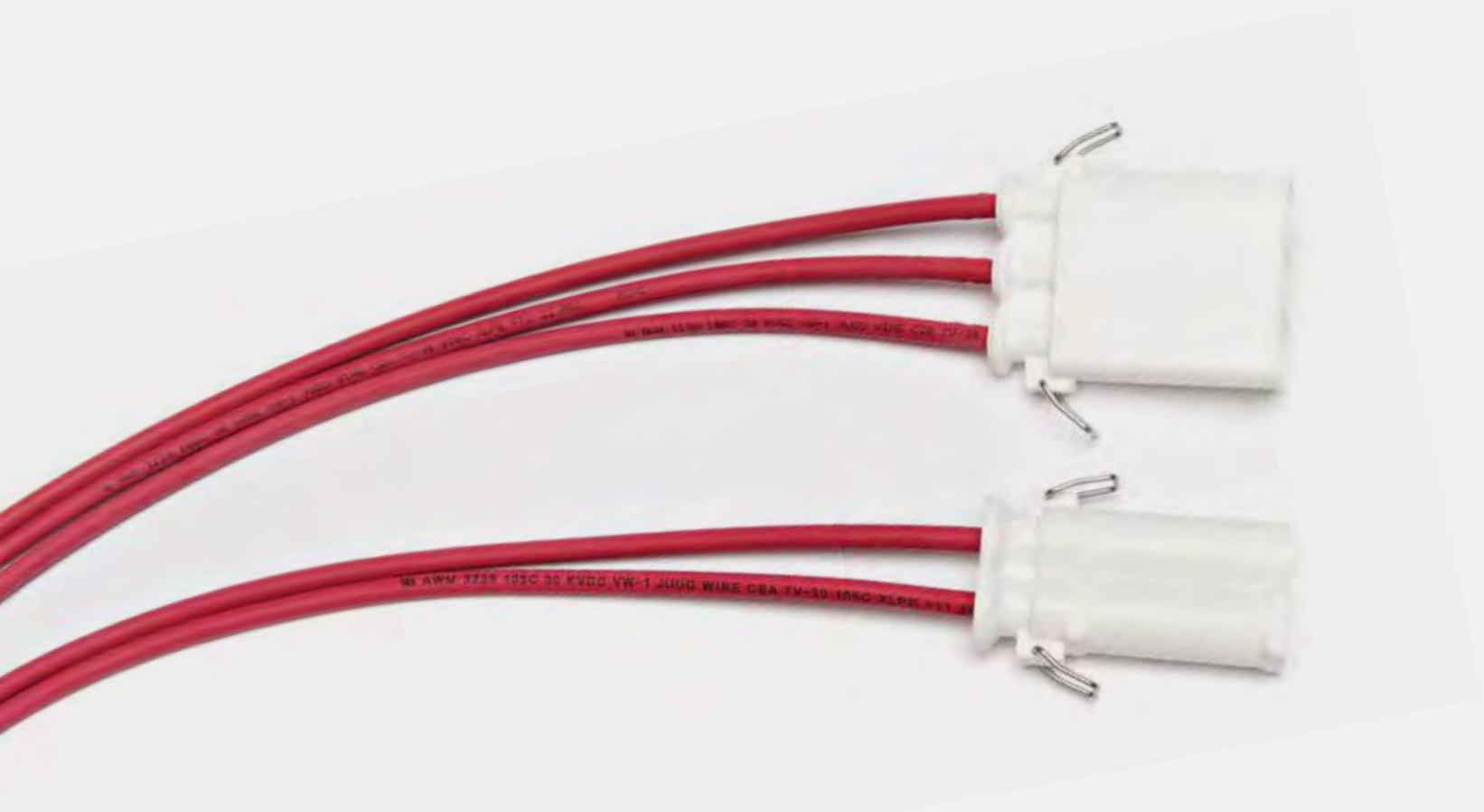
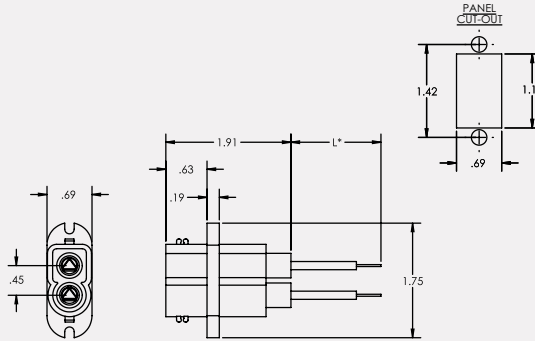
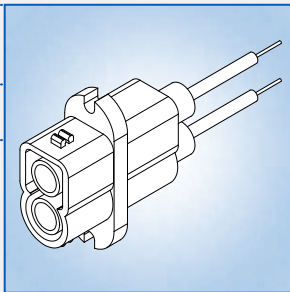
Up to 15 kVDC

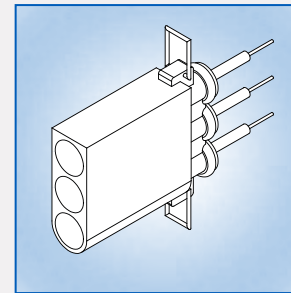
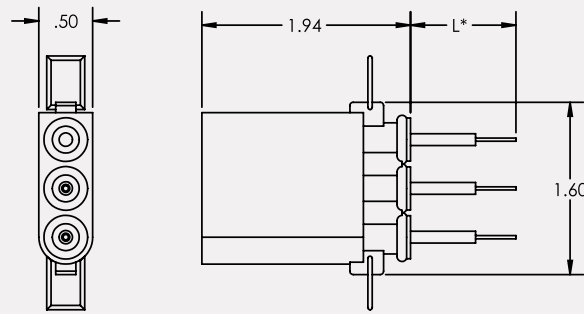


E201QX"L"

Two Circuit Polarized Panel Mounting Receptacle

Up to 15 kVDC

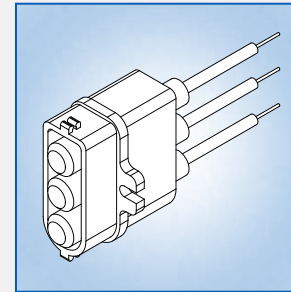
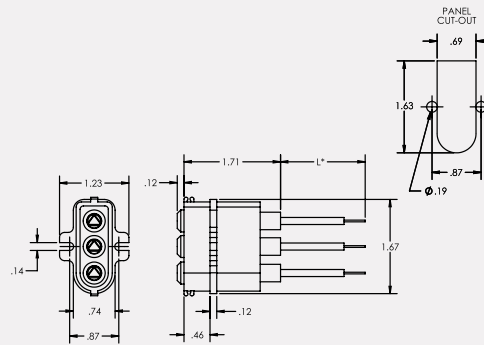




E300QX"L"

Three Circuit Plug Available in Mixed (Ground/Lead) Configurations

Up to **15** kVDC



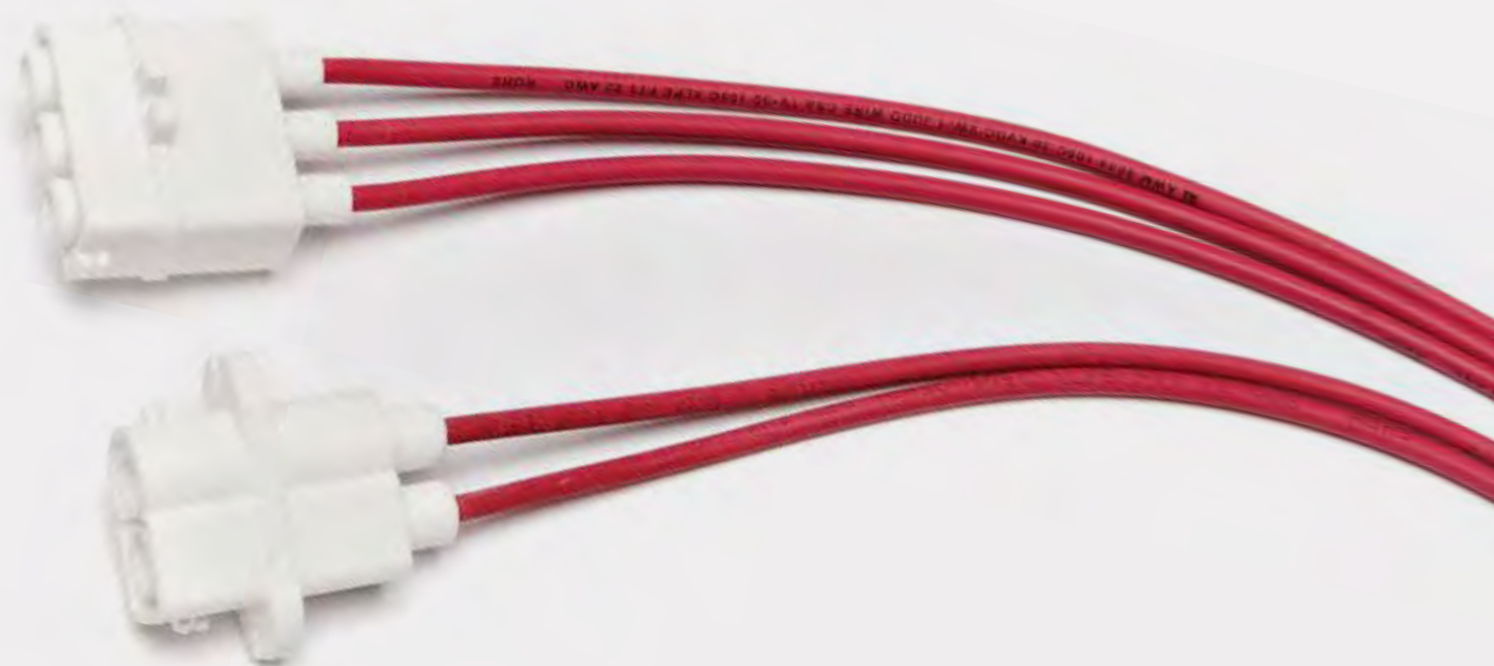
E301QX"L"

Three Circuit Panel Mount Receptacle Available in Mixed (Ground/Lead) Configurations

Up to **15** kVDC

Unless otherwise specified:

- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (E200QX"L" with 48 inches of wire is ordered as E200QX48)
- "QX" in the part number is the wire type. It is 22AWG, 30 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, color red, used in all circuits
- Optional "UX" in the part number is the wire type. It has two (2) 22AWG, 30 kVDC rated, UL 3239 style wires made with cross-linked polyethylene insulation, color red, and one (1) 600 V lead wire 18AWG, green signal wire (not shown)
- Connector bodies are molded in flame-retardant polypropylene, color white
- Voltage ratings are DC voltages, continuous operation when properly mated
- E2 Series plugs will mate with E2 Series receptacles, E3 series plugs mate with E3 series receptacles
- All dimensions are in inches



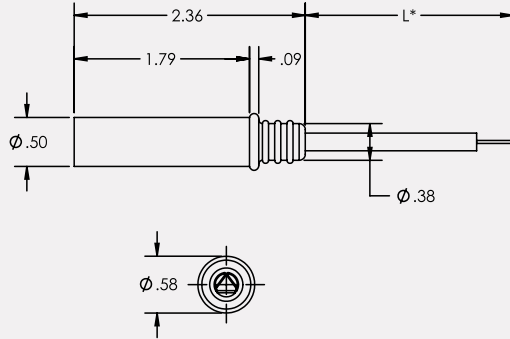
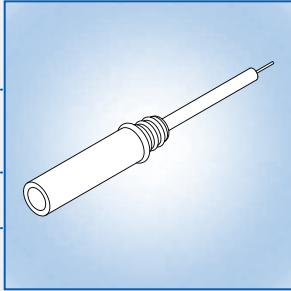
F-SERIES

The F-Series single pole connectors and cable assemblies carry a higher operating voltage rating than the smaller A-Series. For those applications where a simple yet safe disconnect is required at higher voltages, the F-Series is the perfect choice.

F101RX"L"

Single Circuit In-Line Receptacle

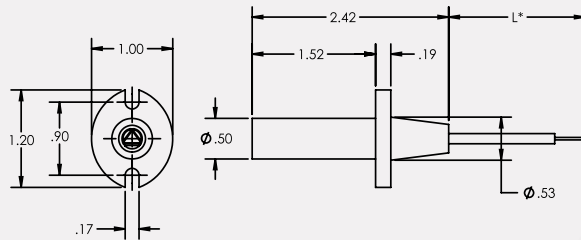
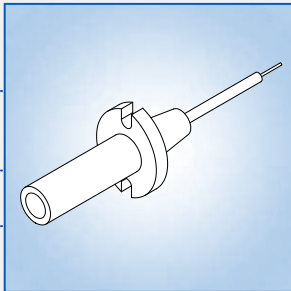
Up to **20** kVDC



F301RX"L"

Single Circuit Panel Mount Receptacle

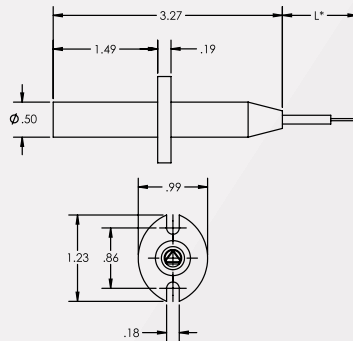
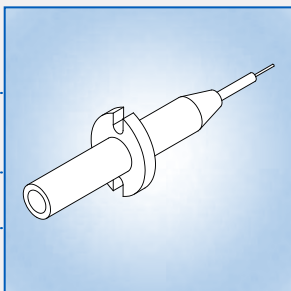
Up to **30** kVDC

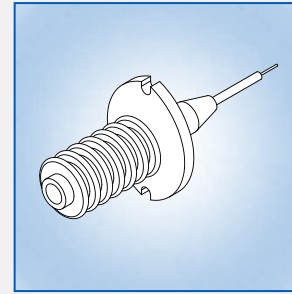
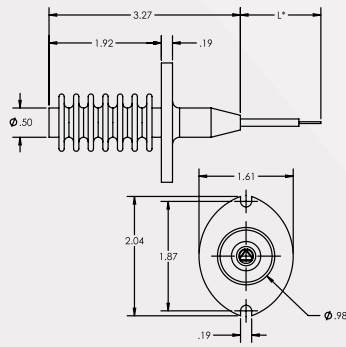


F303RX"L"

Single Circuit Panel Mount Receptacle

Up to **35** kVDC

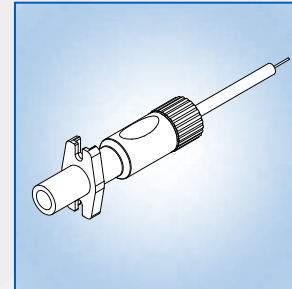
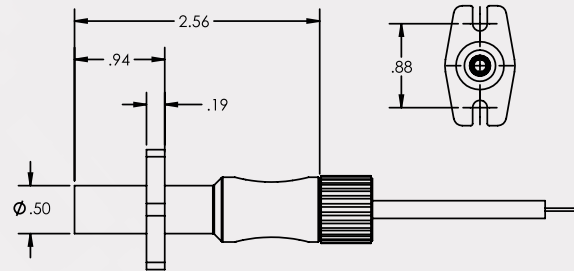




F310RX"L"

Single Circuit Panel Mount Receptacle with Extended Surface

Up to **35** kVDC



F311

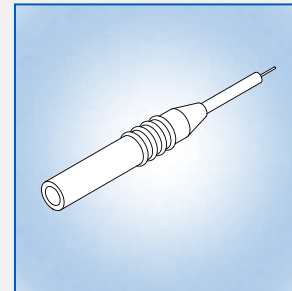
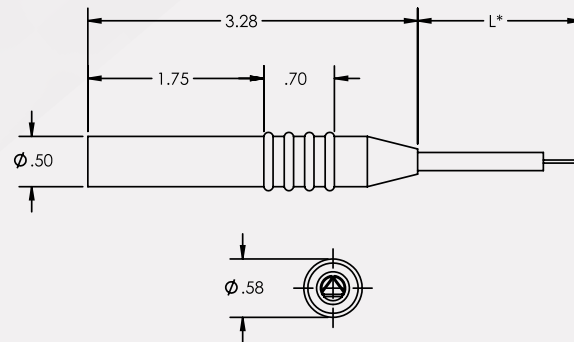
Single Circuit Panel Mounted Field Installable Receptacle

Available as an In-Line and Multiple Diameters to Accommodate Different Wire Sizes. Consult Factory for Additional Details.

Wire Shown Not Included

Molded in Black Polybutylene Terephthalate

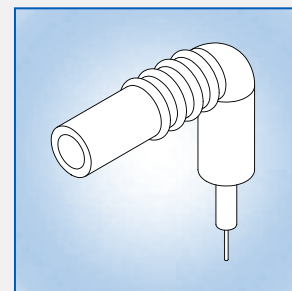
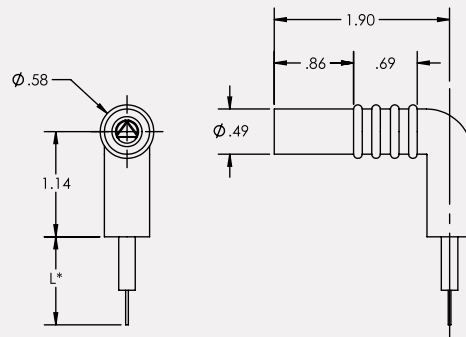
Up to **25** kVDC



F402RX"L"

Single Circuit In-Line Receptacle

Up to **35** kVDC



F500RX"L"

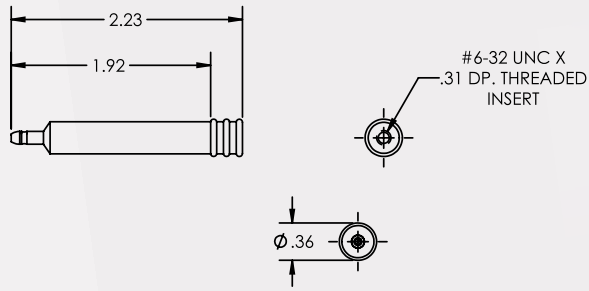
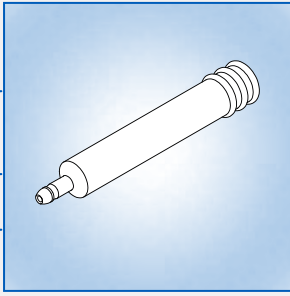
90 deg: Single Circuit In-Line Receptacle

Up to **35** kVDC

F600

Single Circuit Straight Plug
for Stud Mounting

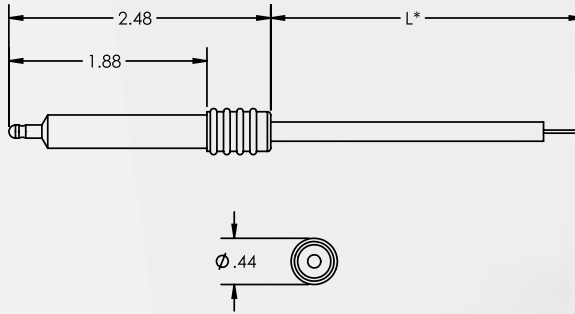
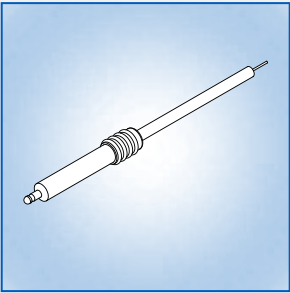
Up to **35** kVDC



F602RX"L"

Single Circuit Straight Plug

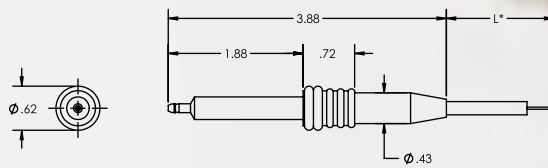
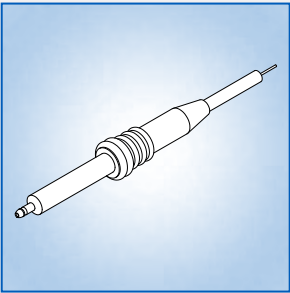
Up to **35** kVDC



F701RX"L"

Single Circuit Straight Plug
with Extended Length

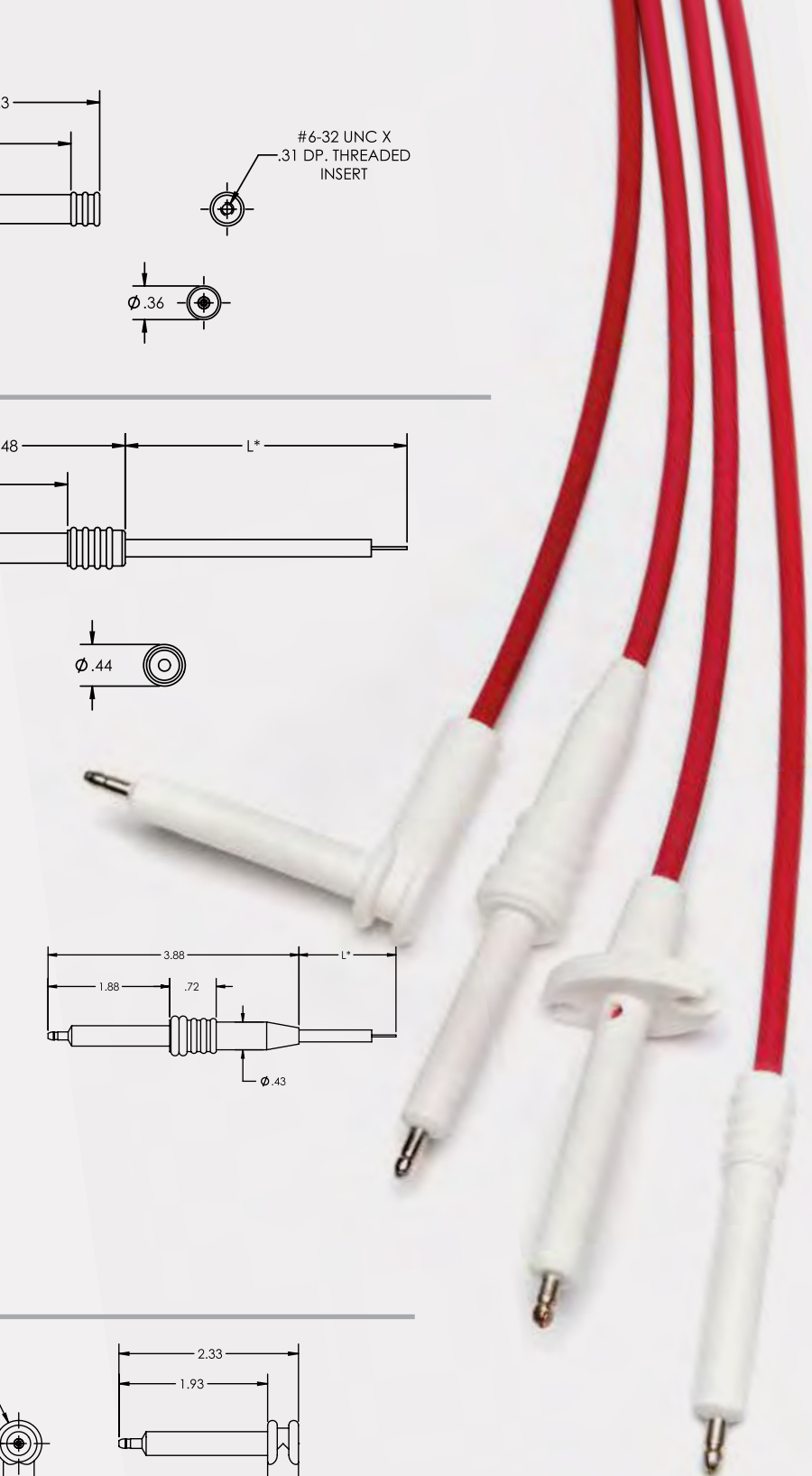
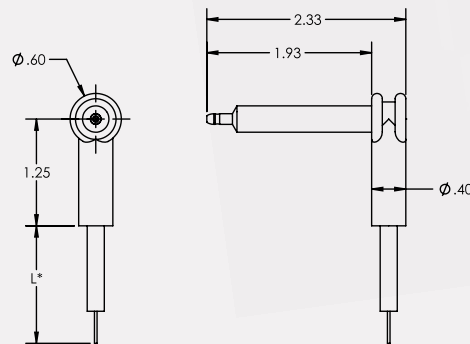
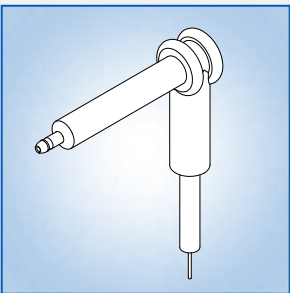
Up to **35** kVDC

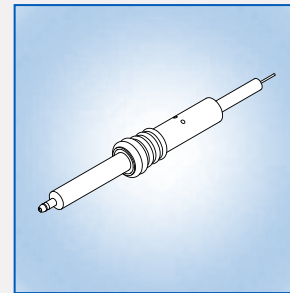
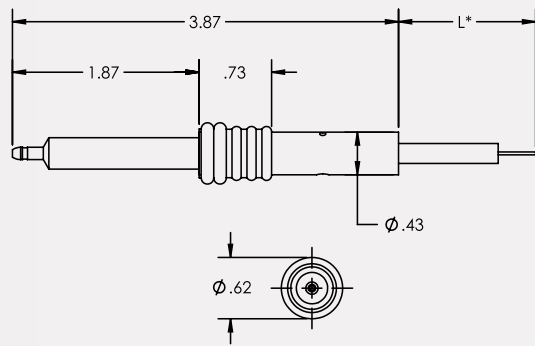


F702RX"L"

90 deg: Single Circuit
In-Line Plug

Up to **35** kVDC

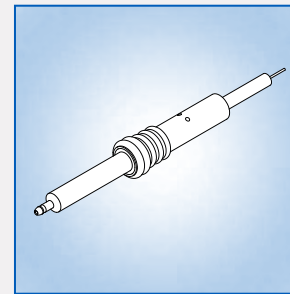
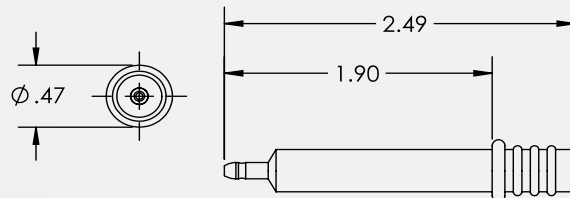




F705RX"L"

Single Circuit In-Line Plug

Up to 30 kVDC

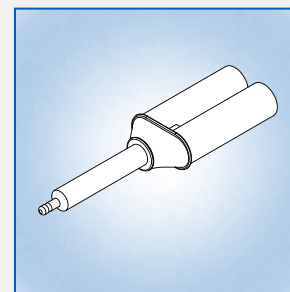
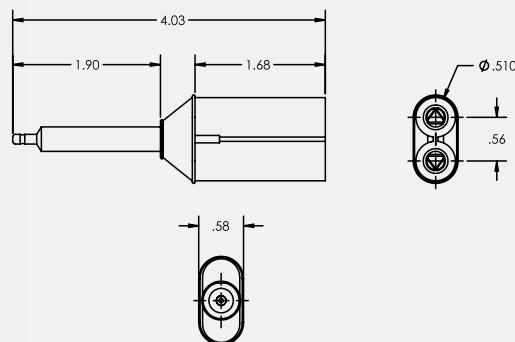


F800.XXX

Single Circuit Field Installable Plug

XXX = I.D's of: 0.125"
0.165"
0.187"
0.219"
0.224"

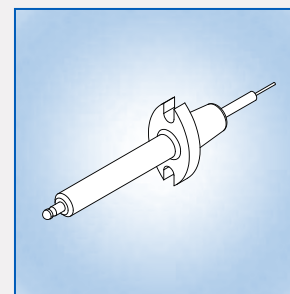
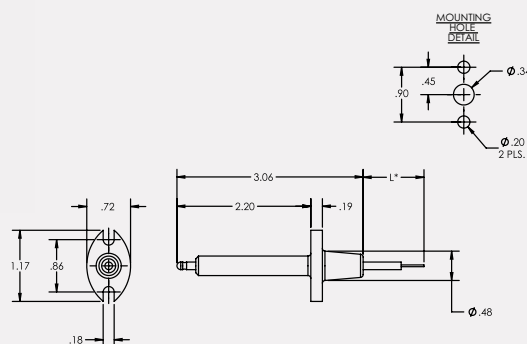
Up to 35 kVDC



F801

Dual Receptacle to Single Plug Adapter

Up to 30 kVDC



F901RX"L"

Single Circuit Straight Panel Mount Plug

Up to 35 kVDC

Unless otherwise specified:

- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (F301RX"L" with 48 inches of wire is ordered as F301RX48)
- "RX" in the part number is the wire type. It is 22AWG, 40 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, color red
- Connector bodies are molded in flame-retardant polypropylene, color white
- Voltage ratings are DC voltages, continuous operation when properly mated
- All F Series plugs will mate with all F Series receptacles
- All dimensions are in inches

G-SERIES

The G-Series is perfect for high voltage applications requiring extremely small and lightweight components such as in military or aerospace applications. From heads up displays to missile ignition systems, the G-Series can be deployed almost anywhere.

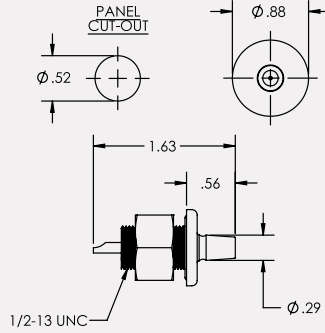
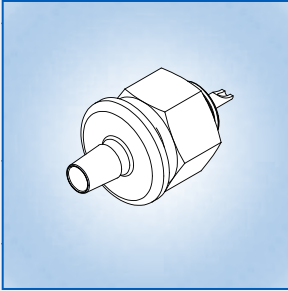
G100

Single Circuit Panel Mounting Feedthrough Plug with Solder Cup Molded-in Contact

Connector Body molded in Black PBT

Includes Nylon Nut and O-Ring

Up to **20** kVDC



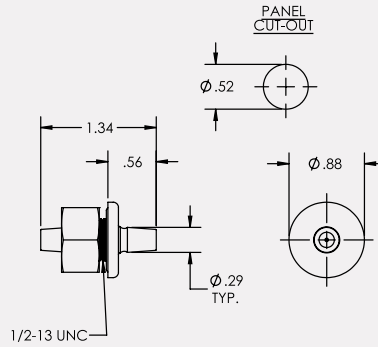
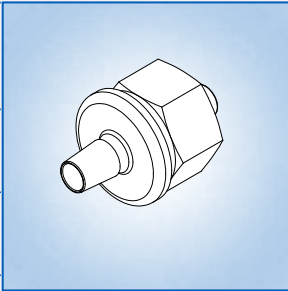
G101

Single Circuit Panel Mounting Feedthrough Plug with Double-ended Mating

Connector Body Molded in Black PBT

Includes Nylon Nut and O-Ring

Up to **20** kVDC



G104BA"L"*

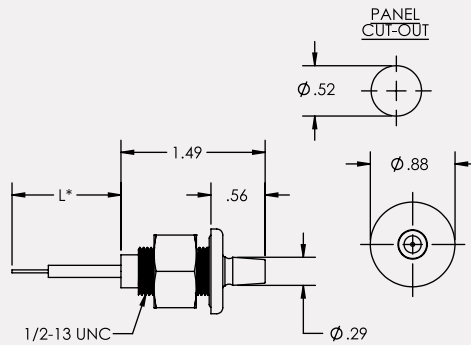
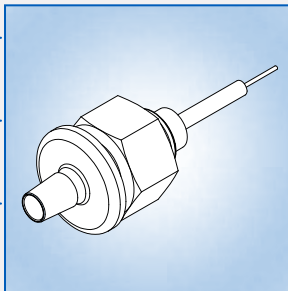
Single Circuit Panel Mounting Plug with Wire Lead

Connector Body Molded in Black PBT

Includes Nylon Nut and O-Ring

BA Wire: 20AWG, 30 kVDC Rating, UL 3239 with White Silicone Insulation

Up to **20** kVDC



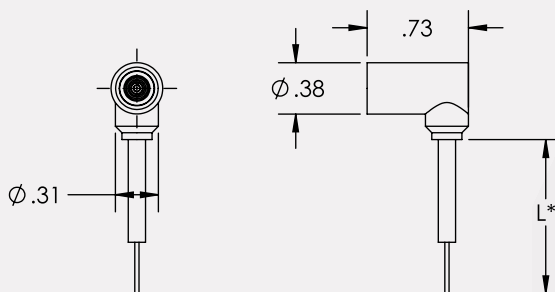
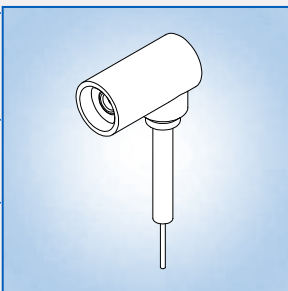
G102BA"L"*

Single Circuit Right Angle Receptacle Molded in Silicone Rubber

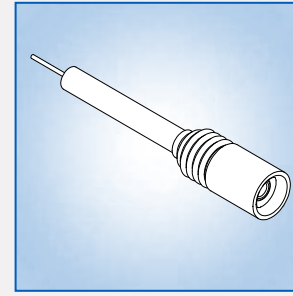
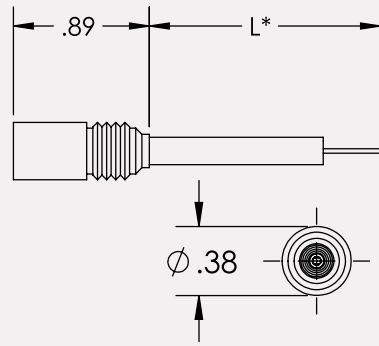
Connector Body Molded in Silicone Rubber

BA Wire: 20AWG, 30 kVDC Rating, UL 3239 with White Silicone Insulation

Up to **20** kVDC



G103BA"L"



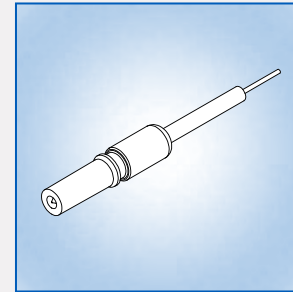
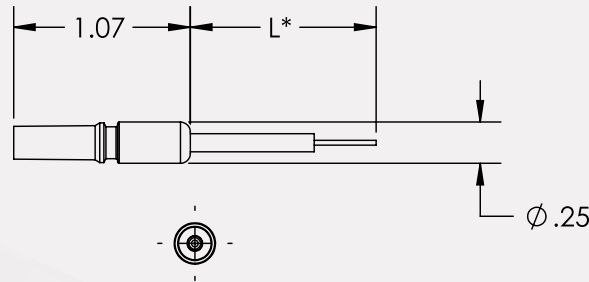
Single Circuit In-line Receptacle Molded in Silicone Rubber

Connector Body Molded in Silicone Rubber

BA Wire: 20AWG, 30 kVDC Rating, UL 3239 with White Silicone Insulation

Up to 20 kVDC

G200VG"L"



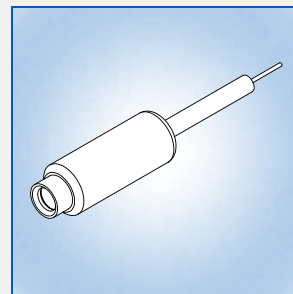
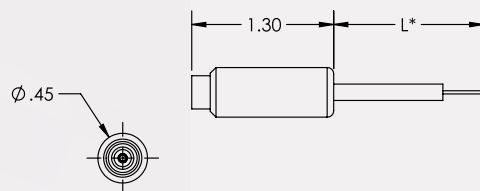
Single Pole Environmentally Sealed Insert Molded Plug

Connector Body Molded in Nylon

VG wire: 22 AWG, 20kVDC Rating, UL 3239 with White Silicone Insulation

Up to 10 kVDC

G202VG"L"



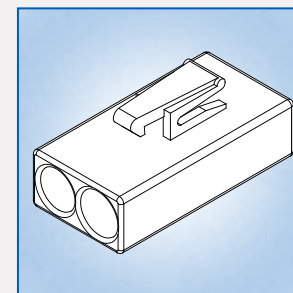
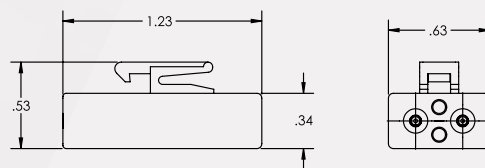
Single Circuit Environmentally Sealed In-line Receptacle

Connector Body molded in TPR

VG Wire: 22 AWG, 20 kVDC Rating, UL 3239 with White Silicone Insulation

Up to 10 kVDC

G400



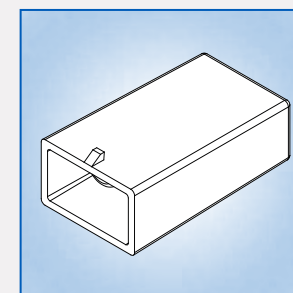
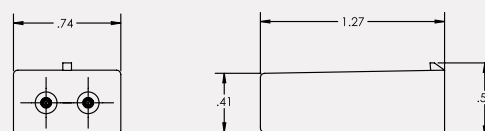
Crimp Contacts

Field Installable Two Pole Plug Molded in Black Nylon

Accepts 18-22 AWG Wire with O.D's up to 0.150"

Up to 10 kVDC

G401



Crimp Contacts

Field Installable Two Pole Receptacle Molded in Black Nylon

Accepts 18-22 AWG wire with O.D's up to 0.150"

Up to 10 kVDC

H-SERIES

The H-Series of circular connectors is designed to bring control circuits into a high voltage environment where dielectric transformer oils are used. The receptacles are panel mounted and provide a seal that keeps the oil in place, even in harsh environments such as x-ray tubes used in CT Scan imaging equipment.

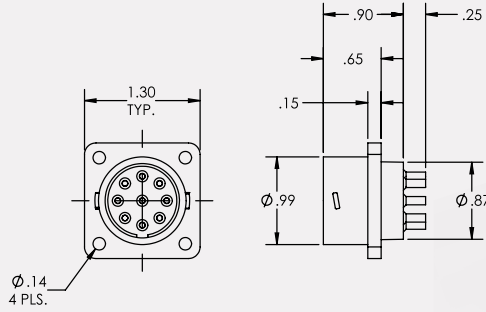
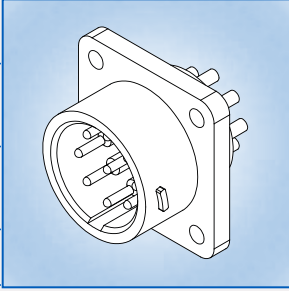
H401

Nine Pin Circular Receptacle with Short Tail

Requires O-Ring Seat on Panel Wall

Molded in Black PET

Up to 5 kVDC in oil

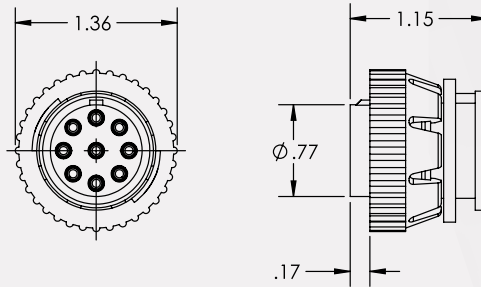
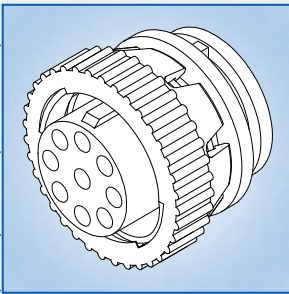


H403

Nine Pole Plug with Rapid Action Vibration Resistant Locking Collar

Body Molded in Black PET, Collar Molded in Black Nylon

Up to 5 kVDC



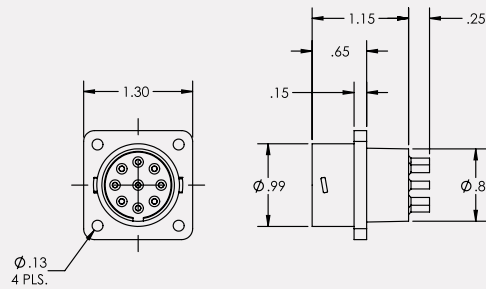
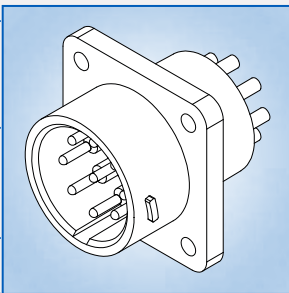
H404

Nine Pole Panel Mount Receptacle with 4 Clearance Holes for Screw Mounting

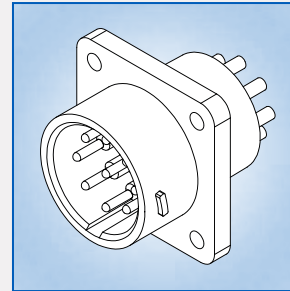
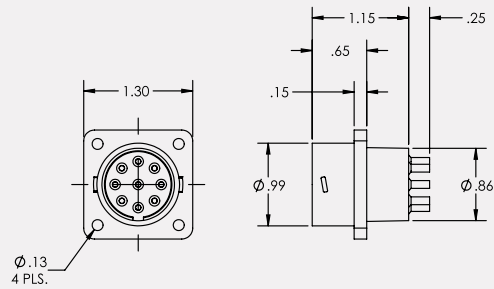
Molded in Place Pins with Field Installable Crimp Snap-On Connections

Molded in Black PET

Up to 5 kVDC in oil



H407

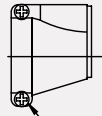
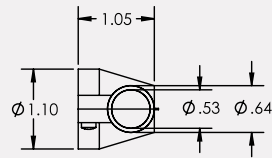


Nine Pole Panel Mount
Receptacle with 4
Clearance Holes for
Screw Mounting

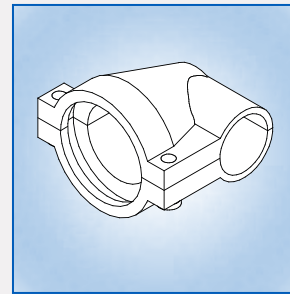
Pins Molded in Place
with Solder Cup
Terminals

Molded in Black PET

Up to 5 kVDC in oil



4-20 X 3/8"
PLASTITE SCREWS (2)
SUPPLIED LOOSE

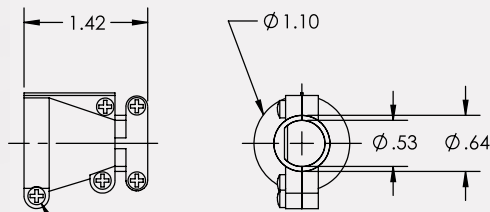


H411

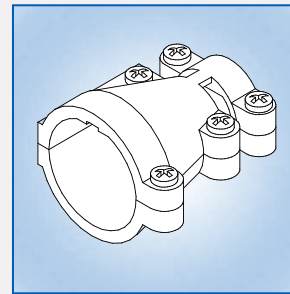
Optional Right Angle Ca-
ble Clamp with 2 Plastic
Assembly Screws

For Use with H403 Plug

Molded in Black
Polypropylene



4-20 X 3/8"
PLASTITE SCREW (5)
SUUPLIED LOOSE



H414

Optional Straight Cable
Clamp with 5 Plastic
Assembly Screws

For use with H403 Plug

Molded in Black
Polypropylene

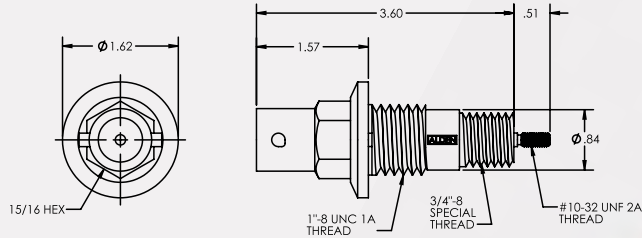
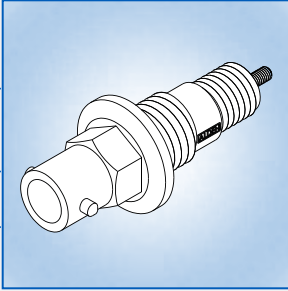
P-SERIES

The P-Series connectors and cable assemblies are designed specifically for applications requiring higher voltages in a compact size. The panel mounted receptacles can be immersed in dielectric transformer oils where they maintain a perfect seal even in extreme temperatures. The P-50 series is the industry standard for mammography x-ray tubes and is used in high power laser applications as well.

P500

Single Circuit Panel Mounting Oil Tight Receptacle

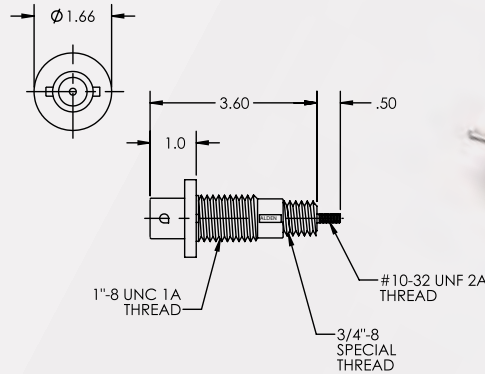
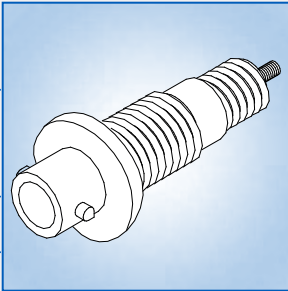
Up to **55** kVDC



P502

Single Circuit Low Profile Panel Mounting Oil-Tight Receptacle

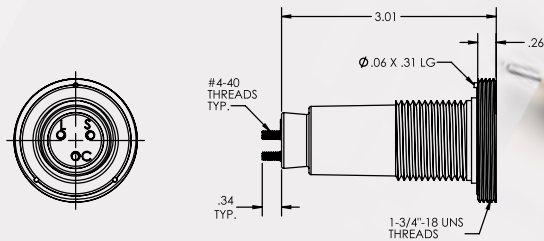
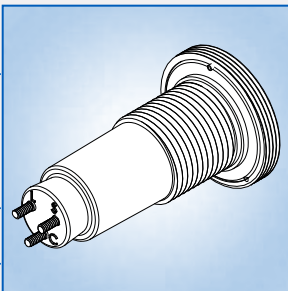
Up to **55** kVDC



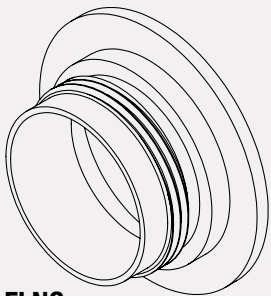
P700

Three Pole Panel Mounting Oil Tight Receptacle with Threaded Flange for Panel Ground

Up to **75** kVDC

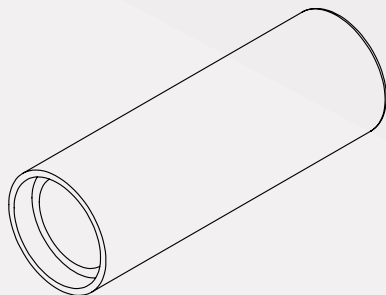


P5 Series Accessories*



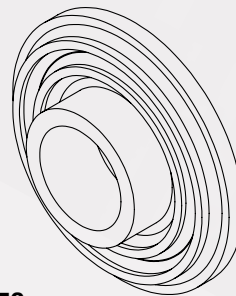
P-FLNG

Provides Mounting Flange to be used with the P502 when the P506 plug is specified



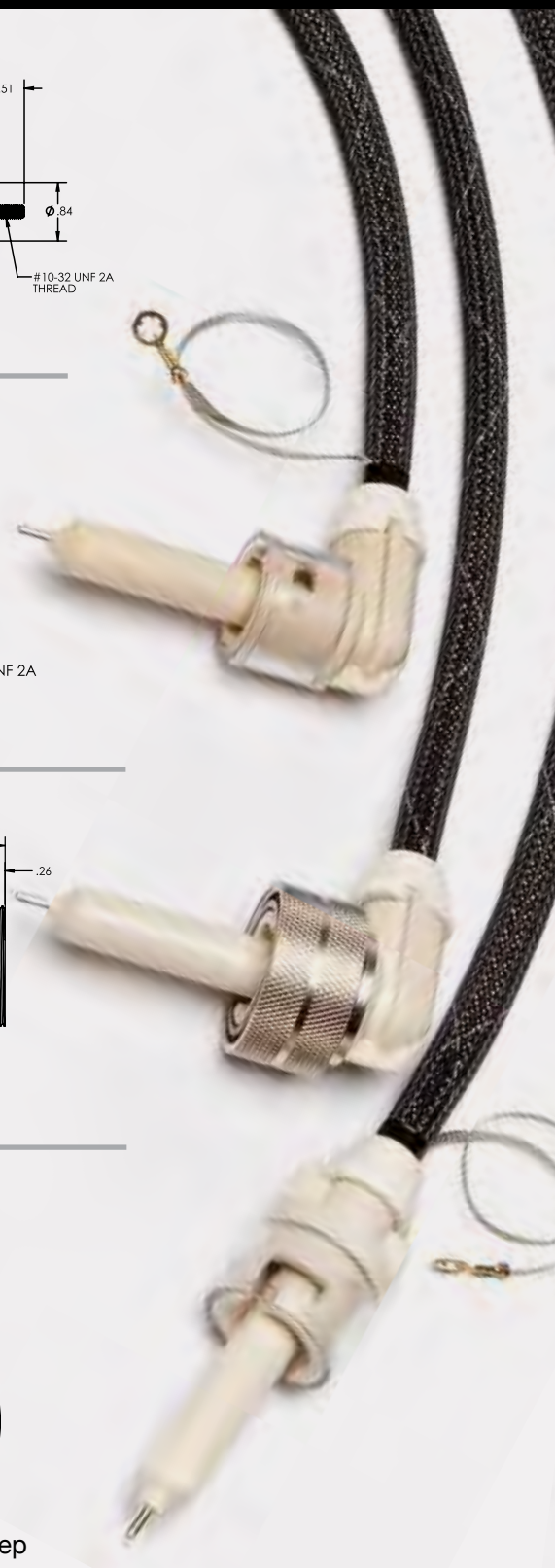
PL-50

Potting Cup provides easy use of potting P5 Receptacle

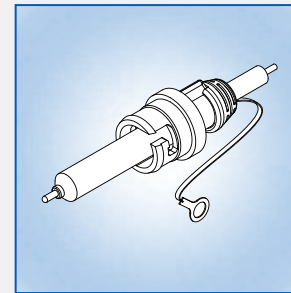
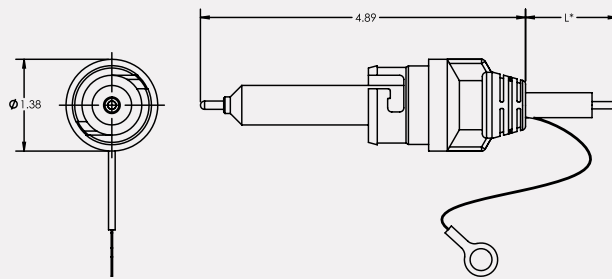


BN-50

Provides an external creep path for P5 Receptacles



* Consult factory for further details

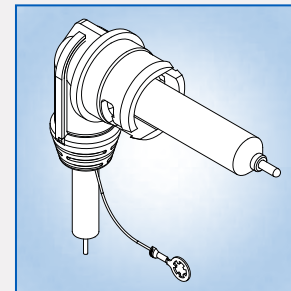
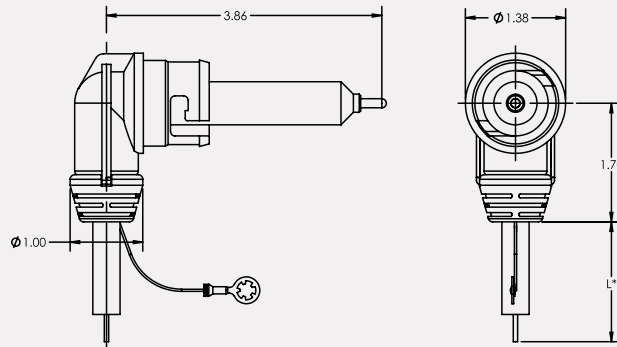


P503BH\"L\"

Single Circuit Twist Locking Plug

Mates with P500 & P502

Up to 55 kVDC

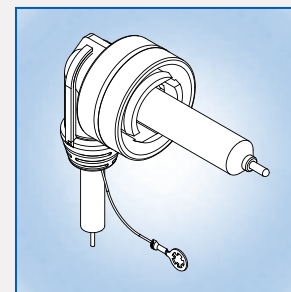
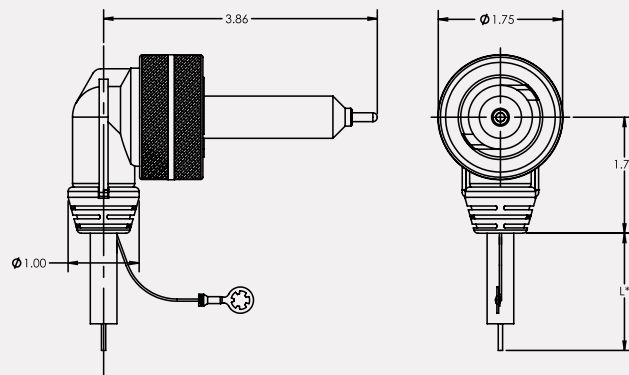


P504BH\"L\"

Single Circuit Right Angle Twist Locking Plug

Mates with P500 & P502

Up to 55 kVDC

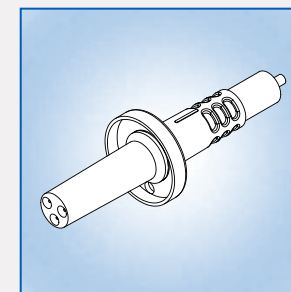
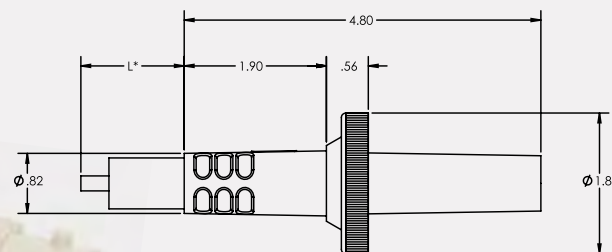


P506BH\"L\"

Single Circuit Self-Grounding Right Angle Twist Locking Plug

Requires the use of P-FLNG and Can Only Mate with P502

Up to 55 kVDC



P701QS\"L\"

Three Pole Plug and Cable Assembly

Mates with P700

Up to 75 kVDC

Unless otherwise specified:

- "L" in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (P503BH\"L\" with 48 inches of wire is ordered as P503BH48)
- "BH" and "QS" in the part numbers are the wire types. Consult factory for details
- Connector bodies are molded in flame-retardant PET or PBT, color natural
- Voltage ratings are DC voltages, continuous operation when properly mated
- All dimensions are in inches

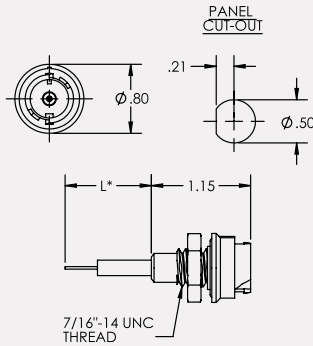
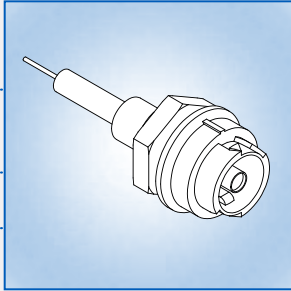
V-SERIES

The V-Series features ergonomic, intuitive auto-locking connectors that are well-suited for hand held devices that require high voltage. In applications where easy, fast and secure connections are required frequently, the V-Series is the right choice.

V121QX"L"

Single Pole Panel Mount Receptacle

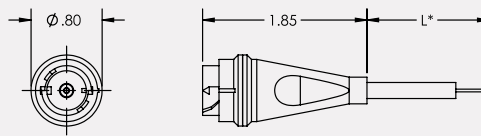
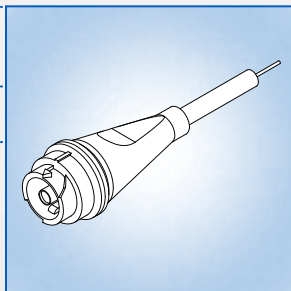
Up to **20** kVDC



V171QX"L"

Single Pole In-Line Receptacle

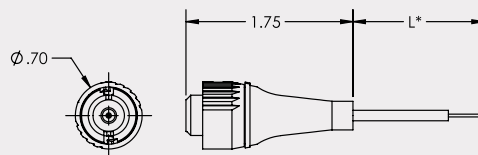
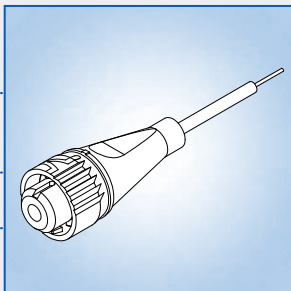
Up to **20** kVDC

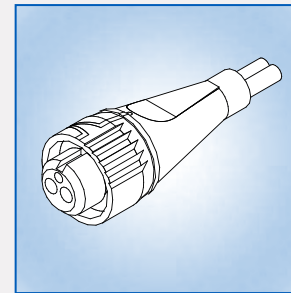
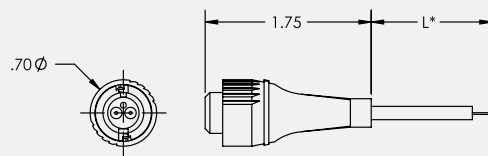


V131QX"L"

Single Pole Plug/Cable Assembly

Up to **20** kVDC

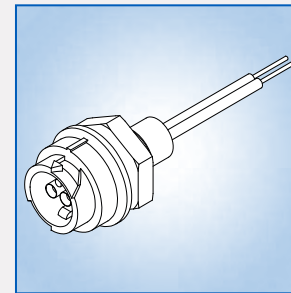
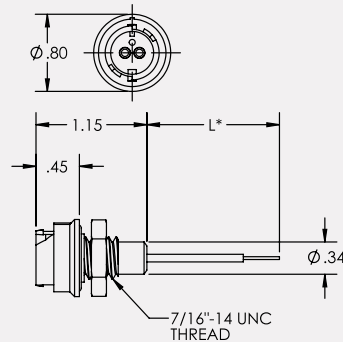




V132CY\"L\"

Two Pole Plug/Cable
Assembly

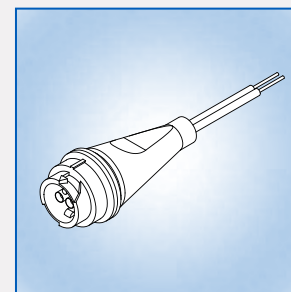
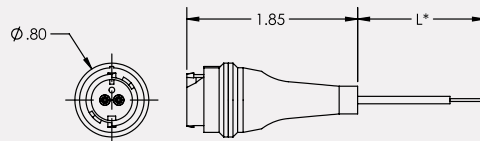
Up to **20** kVDC



V122CY\"L\"

Two Pole Panel Mount
Receptacle

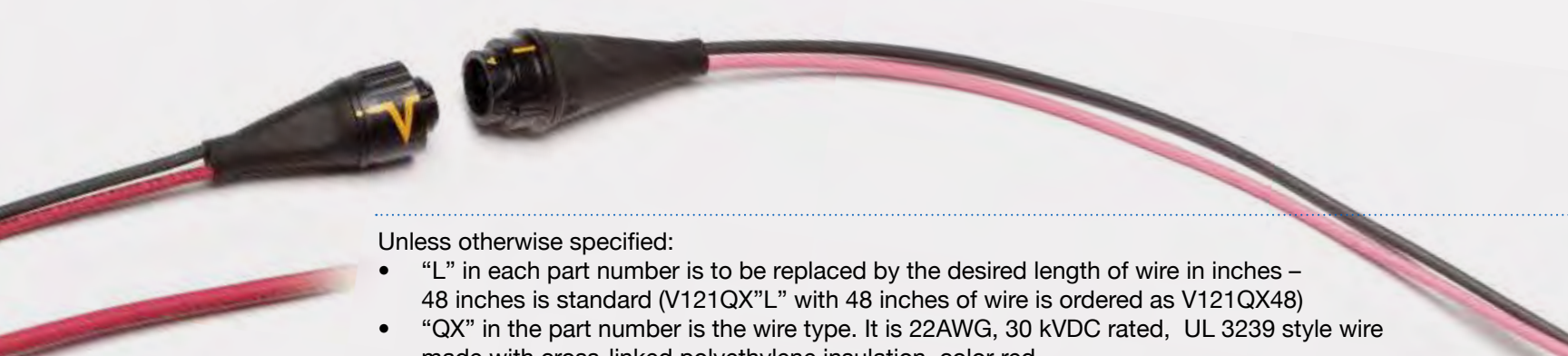
Up to **20** kVDC



V172CY\"L\"

Two Pole In-line
Receptacle

Up to **20** kVDC



Unless otherwise specified:

- “L” in each part number is to be replaced by the desired length of wire in inches – 48 inches is standard (V121QX”L” with 48 inches of wire is ordered as V121QX48)
- “QX” in the part number is the wire type. It is 22AWG, 30 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, color red
- “CY” in the part number is the wire type. It is 22AWG, 15 kVDC rated, UL 3239 style wire made with cross-linked polyethylene insulation, one color red, the other black
- Connector bodies are molded in polyamide materials
- Voltage ratings are DC voltages, continuous operation when properly mated
- All V131 Series plugs will mate with all V121 and V171 Series receptacles. All V132 Series plugs will mate with all V122 and V172 Series receptacles
- All dimensions are in inches

ORDERING INFORMATION

To order the standard products listed in this catalog please find your local Amphenol Alden sales rep at www.AmphenolAlden.com, or contact our customer service and marketing team directly at (508) 427-7000.

When placing an order, please reference the connector and length of wire you require. For example, to order an A400QX connector with a lead of 72 inches, the sales part number would be "A400QX72."

Single or double ended standard cable assemblies can be made to meet the needs of your end application. Our experienced high voltage engineers are available to discuss your application and determine which product is right for you, or to help develop a custom solution that exactly meets your needs.

ELECTRICAL CONNECTOR VOLTAGE RATINGS

Ratings listed in this catalog apply to clean and dry mated connector pairs in standard atmospheric conditions. **NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE** and all customers must test each component to determine that it meets their operating and reliability requirements. Connectors are tested at elevated voltages and then derated for operation to assure that the rated potential does not exceed the insulating value of the body of the device, the wire, or exceed sparkover value to an electrical ground from the wire exit or the connector aperture when properly mated or mounted. Electrical ratings and test voltage are based on using direct current (DC) with less than 5 milliamps of current applied at less than 1 kilovolt rise per second. Test duration is for one minute. Connector mated pairs must be rated by the lowest connector (or component) value, using customer applied safety factors. When connectors are used in an adverse environment, such as high temperature, humidity, or dust content, the connector should be derated. Customer must also verify the suitability of connector use under power application conditions other than that used of rating determination per the above.

AMPHENOL ALDEN HIGH VOLTAGE CAPABILITIES

Engineering

At Amphenol Alden we pride ourselves on our talented and experienced design team. When something off the shelf can't meet your needs, our team will ensure an optimal solution is developed. Working collaboratively, we engage with customers on quick custom projects as well as multi-year new product introductions. Utilizing our dedicated project management organization we ensure a smooth development process from start to finish. Whether you need a custom proprietary interconnect or a non-standard cable, we will find a great solution for you and your end application.

Engineering Snapshot

- Global Engineering Team with Engineers in the USA, Mexico, and China
- Rapid Prototyping with in house 3D Printing
- Electrical, Mechanical, & Flow Analysis
- 70 Years of custom High Voltage Design History

Cable Assembly & Fabrication

Having helped shape the high voltage interconnect industry, Amphenol Alden has developed and refined numerous insert and over molding techniques. Given our global manufacturing footprint, we can tailor a production solution to fit projects at low or high volume. When you need a partner with deep expertise in high voltage interconnect and cable assembly manufacturing, look no further than Amphenol Alden.

Cable Assembly & Fabrication Snapshot

- Manufacturing in the USA, Mexico, and China
- Thermoplastic and silicone liquid injection molding
- Overmolding of cable assemblies with components, strain relief, and yokes
- Insert molding of pins, sockets, and other components as required
- Inventory control & total supply chain management

Test & Validation

Ensuring a design meets your exacting specifications before and after product launch is a primary focus of Amphenol Alden. During development, we utilize high voltage test equipment capable of testing up to 200 kVDC and partial discharge corona testing up to 100 kVAC. Beyond product specifications, our quality department is adept at validating and monitoring processes and conformance to quality standards. With products from Amphenol Alden, you can rest easy knowing that the first part off the line will be the same as the last.

Test & Validation Snapshot

- Hipot testing to 200 kVAC
- Partial discharge corona detection to 100 kVAC
- X-Ray inspection
- Helium leak testing
- Systematic quality control conforming to ISO9001:2008 & ISO13485:2003

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Alden

Phone (508) 427-7000

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