



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





ITT

Interconnect Solutions

Audio XL



Engineered for life

Cannon, VEAM, BIW

A Historical Achievement of Technology Leadership

Defining and Championing Innovation

Showcasing a portfolio of creativity, ITT's "Engineered For Life" execution embraces products which have become ubiquitous in a broad collection of markets including: Military/Aerospace, Civil Aircraft, Industrial Instrumentation, Medical, Oil & Gas, Energy, Transportation, Telecom/Handset, Computer, Consumer, and Automotive.

ITT's rich interconnect history embraces contributions to both technological breakthroughs and social movements. With one of the industry's broadest product offerings, ITT's interconnect products have supported:

- Every Free World space mission, bringing the universe to our doorstep.
- Motion picture, radio, and television equipment, serving laughter and entertainment to millions.
- Commercial and military communications systems, linking the voices of the world.
- Computerized tools, reshaping the information highway.
- Aircraft, rapid transit, and automobiles, mobilizing our expanding society.
- Oil and natural gas production, powering the world's economies.
- Agricultural equipment, attacking the roots of world hunger.



ITT Interconnect Solutions

ITT Interconnect Solutions is a division of the multi-national ITT Corporation, a \$7.8 billion dollar global enterprise representing the brands Cannon, VEAM, and BIW. Our connector portfolio remains the most extensive in the industry offering the most reliable and cost effective range of interconnect solutions. These innovations have enabled ITT to provide products and technologies to such markets as:

- Automotive
- Computer/Consumer
- Industrial/Instrumentation
- Military/Aerospace
- Oil Fields
- Telecom/Handset
- Transportation

When you specify a Cannon, VEAM or BIW connector, you can rely on a product designed, developed, and manufactured to the highest quality and reliability standards. This tradition of excellence is based on ITT's corporate culture of operating its businesses under the principles of Six Sigma. At ITT, Six Sigma is not just a quality philosophy but a complete corporate culture that drives the entire business. Our Value Based Management and Value Based Product Development systems are two cornerstones that allow for the development of both leadership and product engineering principles, ensuring the correct industry leading products are developed to the accepted market driven lead times. These principles have allowed ITT to become the market leader in all of our business portfolios.

Six Sigma Manufacturing

ITT operates manufacturing facilities in the United States, Germany, Italy, Mexico, China, Japan and the UK, all of which have particular product area strengths allowing ITT to offer a truly global footprint to our customers. Our facilities are world class and accommodate full vertical integration utilizing the latest manufacturing technologies including: automated and robotic machining centers, Super Market manufacturing cells, Kanban pull systems, and automated electrical, mechanical, and optical test and inspection equipment. The combination of our manufacturing strength and our

advanced manufacturing facilities allows ITT to offer products at market driven prices. Our capabilities, especially in robotics, computerized precision tooling, Kaizen Project Management, Six Sigma tools, and testing, give ITT the most optimized global manufacturing footprint in the interconnect industry.

The Custom Difference

As the industry leader in harsh environment interconnect applications, ITT's world class engineering teams will work directly with our customers to design and develop cost effective solutions for their applications. In many cases we may modify one of our standard designs to ensure a highly reliable solution where timing is critical. Yet, in those cases where a complete custom interconnect solution is required, ITT will work with our customer's Engineers to design an interconnect solution which will be cost effective yet highly reliable. As professional consultants, our Engineering teams will provide a thorough systems and mechanical analysis of any proposed solution. These analyses provide our customers with sophisticated electrical signal and mechanical characterizations to determine the best solution for their application.

RoHS Compliance Information

ITT has implemented a strict parts control plan for all ITT electronics plants worldwide that allows the Cannon, VEAM, and BIW connector product portfolios to meet the requirements of European Union Directive 2002/95/EC better known as the Reduction of Hazardous Substances initiative. As appropriate, specific Cannon, VEAM, and BIW products may be ordered with an R prefix number which insures our customers will receive RoHS compliant parts for their commercial electronics applications and equipment. Since most RoHS hazardous substances center around specific metal plating and lead solder coatings, ITT's products for RoHS compliance are available in the following plating finishes: electroless nickel, stainless steel, Anodize over aluminum and Gold plating. It should be noted that gold plating would be recommended as the replacement for tin-lead solder when ordering board mount connectors.



Cannon Audio XL

In today's audio markets, demanding customers have many choices. Why choose ITT Interconnect Solutions?

Cannon pioneered the first Audio connectors during the early 1920's, the birth of the entertainment industry. Continuing our innovation in these markets, Cannon has moved beyond these early products into today's digital age. Cannon's expertise stems from a commitment to the entertainment industry, a commitment extending longer than any other supplier. Cannon's audio product line offers a broad spectrum of choices encompassing low cost products for less demanding applications to higher-end connectors for applications requiring extra durability.

First introduced by Cannon in 1958, the overwhelming industry acceptance of our XLR connectors culminated in the recent induction into the TECnology Hall of Fame by the Mix Foundation for Excellence in Audio, further symbolizing our instrumental participation in the advancement of audio technology. This recognition substantiates Cannon's XLR as the industries leading audio connector.



In addition to the XLR, global audio and video professionals specify our XLM-PCB connectors. These connectors display such high reliability that they are also preferred by such industries as military, medical, test/instrumentation, transportation, and industrial.








Today, we proudly introduce our new Mini-XL series designed to meet the audio industries demands for a higher density, robust interconnect solutions. The Mini-XL connector represents a 40% reduction in size over our standard

XLR connector. This quick, one touch connect/disconnect circular connector incorporates a design optimized for a wide variety of applications where space is a premium. Be assured, all of our audio connectors are RoHS compliant.

Moving back to our original question, which company's audio connectors have invented the standard since audience's first marveled at the first "talking" motion pictures? Audio professionals know the answer. ITT ICS Cannon continues to own center stage with audio products that have served laughter and entertainment to millions.



XL Series Quick Reference Selection Guide

	XLR Plug	XLR Receptacle	XLM-PCB Receptacle	Mini-XL Plug	Mini-XL Receptacle
					
Number of Contacts	2 to 7	2 to 7	3	3 to 6	3 to 6
Rated Current	5A to 15A	5A to 15A	3A	3A	3A
Rated Voltage (AC)	2 Pin 200V 3-7 pin 133V	2 Pin 200V 3-7 pin 133V	133V	125V	125V
Dielectric Withstanding Voltage (AC)	2 pin 1600V 3-7 pin 1400V	2 pin 1600V 3-7 pin 1400V	1,400V	250V	250V
Insulation Resistance	5,000mΩ min at 500 VDC				
Contact Resistance	2-4 pins 5mΩ max 5-7 pins 10mΩ max	2-4 pins 5mΩ max 5-7 pins 10mΩ max	PCS: 20mΩ max PCV: 30mΩ max PCH: 50mΩ max	30mΩ max	30mΩ max
Durability Cycles	500 Cycles				
Operating Temperature	-35° C ~ +125° C		-35° C ~ +85° C		
Wire Accommodation Reference AWG (Max)	2-3 pin #14 4 pin #16 5-6 pin #18 7 pin #20	-	-	#24	-
Wire Cross Section (Max)	2-3 pin 2.1mm ² 4 pin 1.3mm ² 5-6 pin 0.8mm ² 7 pin 0.5mm ²	-	-	0.2mm ²	-
Contact Material/Finish	Copper/Silver Optional Gold Plating	Copper/Silver Optional Gold Plating	Copper/Silver Optional Gold Plating	Copper/Gold	Copper/Gold
Body Material/Finish	Aluminum/ Satin Nickel	Aluminum/ Satin Nickel	Zinc/Nickel	Copper/Nickel	Copper/Nickel
Packaging	10 pieces per bag	10 pieces per tray	25 pieces per tray	50 pieces per box	Male Flange: 100 pcs per box Female Flange: 50 pcs per tray
RoHS	Yes	Yes	Yes	Yes	Yes
Page Number	9	9-11	18-19	23-24	25

XLR, and XLM-PCB are all intermatable but can not be mated with our Mini-XL Series.

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XL Series

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XLR

High grade professional use audio and other low level circuit applications. Two to seven position plugs and receptacles featuring shock absorbing resilient rubber insulator and light weight aluminum shell.

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XLM-PCB

Three position PCB mount receptacles with metal shell for improved EMI shielding, nylon insulator, PCB retention feature and separate ground contact.

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Mini-XL Series NEW

Mini XL

Three to six position plugs and receptacles that are 40% smaller in size and weight than our standard XLR connector.

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Part Number Index

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XLR Series General Performance Characteristics

ITT's broad range of XLR connectors are extensively used in a wide variety of audio OEM applications.

The XLR Series features a quick disconnect latch lock along with a rugged design to withstand extended field use. Available in configurations of 2 and 7 positions, our plugs and receptacles offer precision, machined contacts, shock-absorbing rubber insulators, and lightweight aluminum shells. All XLR connectors are RoHS Compliant.



First introduced in 1958, these connectors have been so instrumental in the advancement of audio technology that our XL series was inducted into the TECnology Hall of Fame in 2007. Today our connectors continue to lead the way into the digital revolution.

Applications

- Amplifiers
- Equalizers
- Mixers
- Medical Electronics
- Recording Equipment
- Test Instruments
- Industrial Control Devices
- Microphones
- TV Cameras

Product Features and Benefits

- Rugged design to withstand extreme field use
- Resilient socket insulator which minimizes vibration and electrical noise
- Quick disconnect latch lock
- Low reflectivity satin finish
- Interchangeable and intermateable with XLB-PCB and XLM-PCB

Performance Specifications

Temperature Rating	-35°C to +125°C	Insulation Resistance	5,000MΩ min at 500 VDC
Number of Contacts	2 to 7	Contact Resistance	5m Ω Max to 10m Ω Max
Rated Current	5A to 15A	Durability Cycles	500 Mating Cycles
Rated Voltage(AC)	133V to 200V	Wire Accommodation Reference AWG (Max)	#14 to #20
Dielectric Withstanding Voltage (AC)	1,400V to 1,600 V	Wire Cross Selection (Max)	0.5mm to 2.1mm

Materials and Finishes

Description	Material	Finish/Treatment
Contacts	Copper Alloy	Silver or Gold
Insulator	Socket- Chloroprene Pin- Nylon	-
Shell	Aluminum Alloy*	Satin Nickel
Barrel	Steel	Nickel
Bushing	Chloroprene	-
Latch Lever	Steel	Nickel

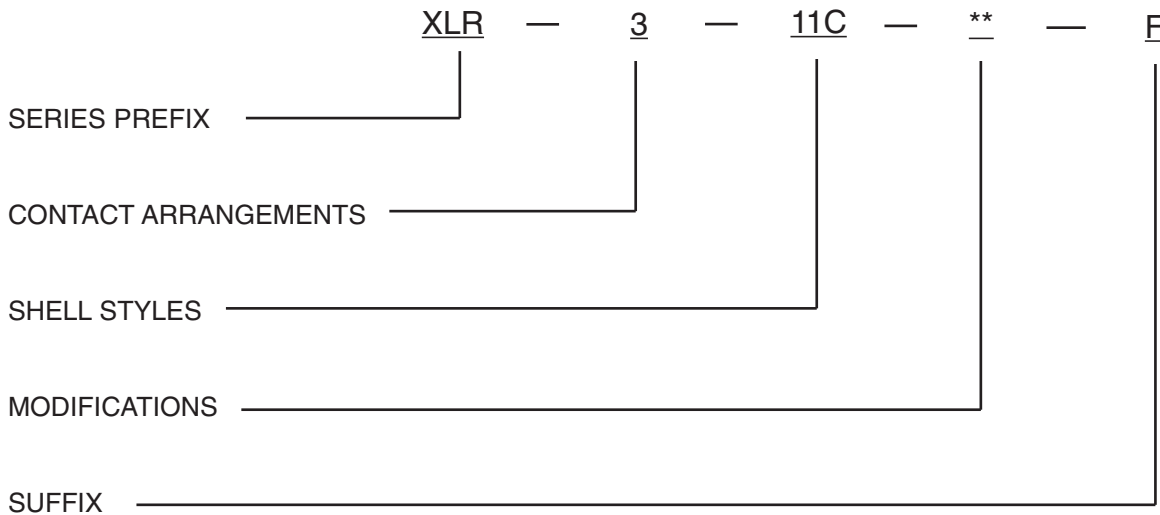
* For adapters XLR-3-11-11-F/XLR-3-12-12-F the material is brass

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

www.ittcannon.com



XLR Part Number Selection Guide



CONNECTOR SERIES

XLR

CONTACT ARRANGEMENTS

See below 2A, 3, 4, 5, 6, 6A, 7

SHELL STYLE

- 11C - Female Plug
- 12C - Male Plug
- 13 - Female Round Flange Receptacle
- 14 - Male Round Flange Receptacle
- 31 - Female Rectangular Flange Receptacle
- 32 - Male Rectangular Flange Receptacle

MODIFICATIONS

- F77 - Rectangular Small Flange (Receptacle 31 and 32)
- F512 - Rectangular Mini-Flange (Receptacle 32 only)
- A176 - Gold plated contacts (for 2-6 pins)
- * 7 pins are gold plated contacts as standard,-A176 not necessary
- **Black shell available, contact factory

SUFFIX

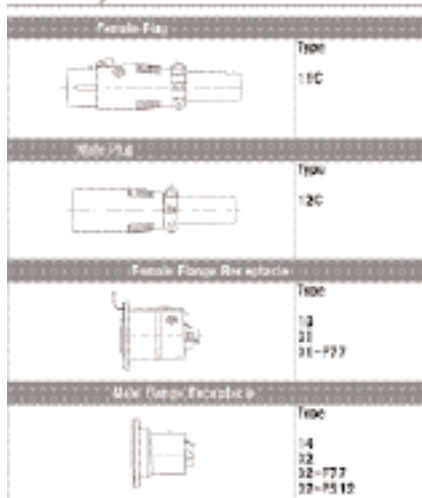
P/N's XLR-3-11-11, XLR-3-12-12 assigned for Bulkhead Adapters only
 "F" to identify lead free products.
 XLR series products are RoHS compliant.

XLR Series							
Number of Contacts	2	3	4	5	6		7
	2A	3	4	5	6	6A	7
Contact Arrangement Configuration (Engaging View Pin Insert)							
Wire AWG Max	#14	#14	#16	#18	#18	#18	#20
Wire Cross Section Max	2.1mm ²	2.1mm ²	1.3mm ²	0.8mm ²	0.8mm ²	0.8mm ²	0.5mm ²

Series Variations

Series/Shell Styles	Contact Arrangement						
	2A	3	4	5	6	6A	7
11C	★	★	★	★	★	★	★
12C	★	★	★	★	★	★	★
13	★	★	★	★	★	★	★
14	★	★	★	★	★	★	★
XLR 31	★	★	★	★	★	★	★
32	★	★	★	★	★	★	★
31-F77	★	★	★	★	★	★	★
32-F77	★	★	★	★	★	★	★
32-F512	★	★	★	★	★	★	★

Shell Styles



Dimensions shown in mm (inch)

Specifications and dimensions subject to change

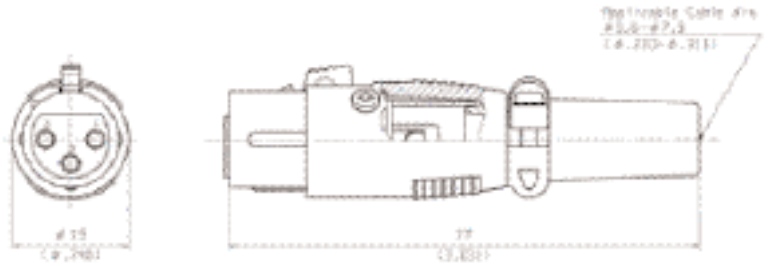
www.ittcannon.com



XLR Plugs

Female Plug

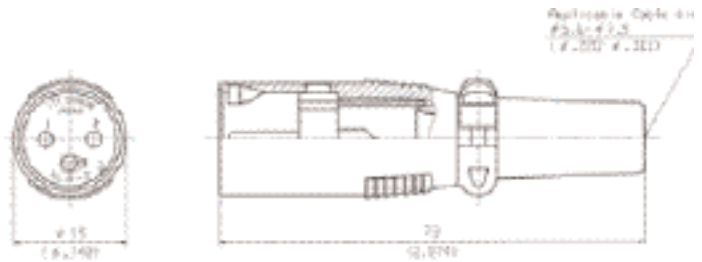
XLR- *-11C



See page 13 for assembly instructions

Male Plug

XLR- *-12C

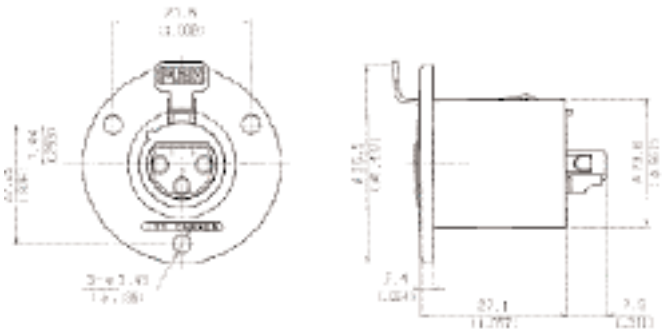


See page 13 for assembly instructions

Receptacles

Female Round Flange Receptacle

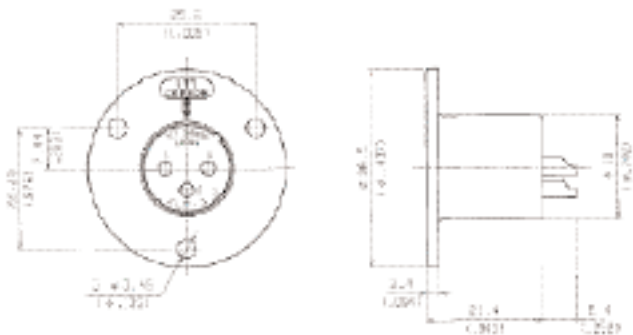
XLR- *-13



See page 15 for panel cutouts.
See Page 22 for latch lever assembly/removal instructions.

Male Round Flange Receptacle

XLR- *-14



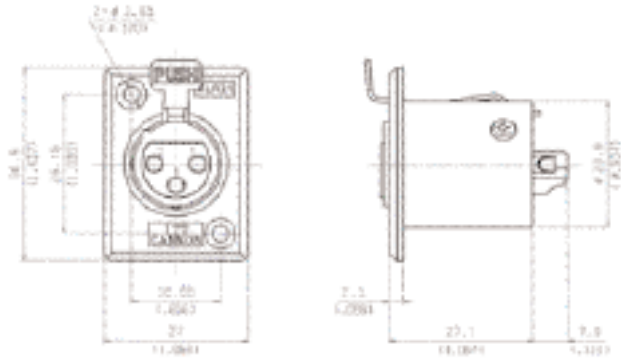
See page 15 for panel cutouts.

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

XLR Receptacles

Female Rectangular Flange Receptacle

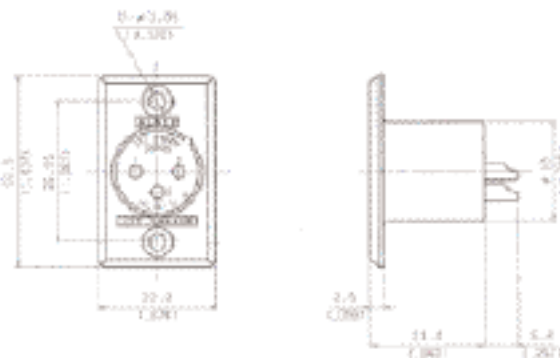
XLR-★-31



See page 15 for panel cutouts.
See page 22 for latch lever assembly/removal instructions.

Male Rectangular Flange Receptacle

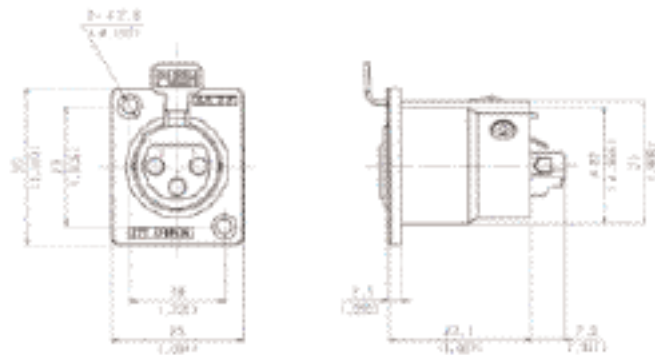
XLR-★-32



See page 15 for panel cutouts.

Female Rectangular Small Flange Receptacle

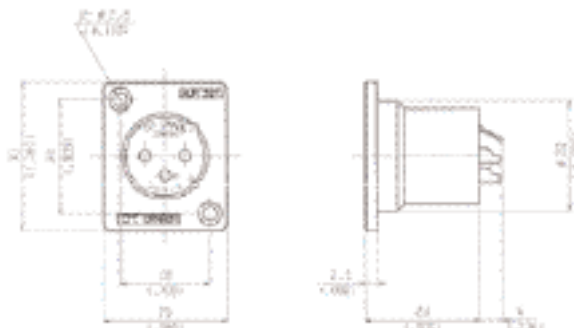
XLR-★-31-F77



See page 15 for panel cutouts.
See page 22 for latch lever assembly/removal instructions.

Male Rectangular Small Flange Receptacle

XLR-★-32-F77



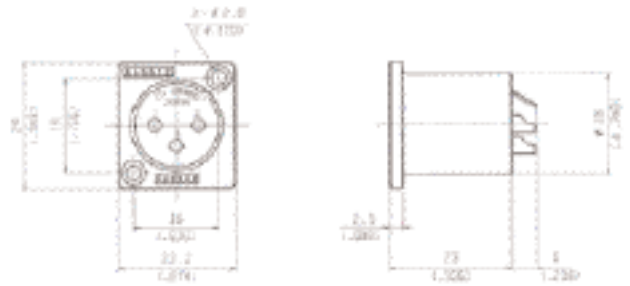
See page 15 for panel cutouts.



XLR Receptacles and Bulkhead Adapters

Male Rectangular Mini Flange Receptacle

XLR- ★-32-F512

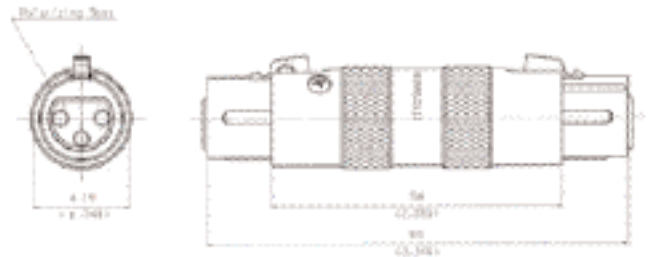


See page 15 for panel cutouts.

Bulkhead Adapters

Female-Female Bulkhead

XLR-3-11-11-F



Male-Male Bulkhead

XLR-3-12-12-F







Dimensions shown in mm (inch)
Specifications and dimensions subject to change

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Dust Caps

	Plastic	Metallic (Brass)	For use with (Shell Styles)
Female Cap	 XLR-SDC (M01) 127007-0284	 XLR-13RC 127007-0244	11C 13 31 31-F77
Male Cap	 XLR-PDC (M01) 127007-0283	 XLR-14PC 127007-0243	12C 14 32 32-F77 32-F512

Small Bushing F502



Note: Small bushing is available separately . Standard bushing is supplied with plug.

Pin/Socket Insert Assembly



XLR-3-socket Insert Assembly
 127007-0051

Contact factory for other pin configurations.



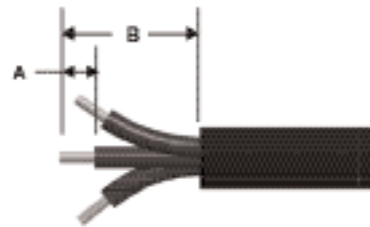
XLR-3-pin Insert Assembly
 127007-0115



Dimensions shown in mm (inch)
 Specifications and dimensions subject to change

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Number of Contacts	Strip Dimensions	
	A mm (inch)	B mm (inch)
2,3	6.0~7.0 (.236-.276)	15mm (.591)
4	5.0~6.0 (.197-.236)	15mm (.591)
5,6	4.5~5.5 (.177-.217)	15mm (.591)
7	2.5~3.5 (.098-.138)	15mm (.591)



First, strip the wire to dimension, as shown.



Insert bushing into shell.



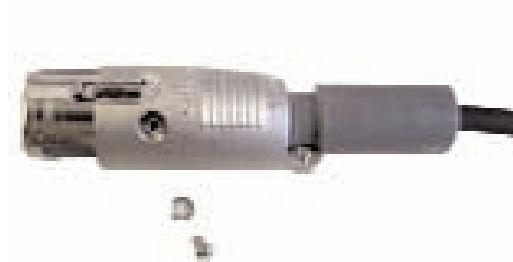
Slide shell assembly and insulator tube onto cable.



Preparing Insert Assembly; Solder individual center conductors to each contact. Visually inspect solder joints before proceeding.



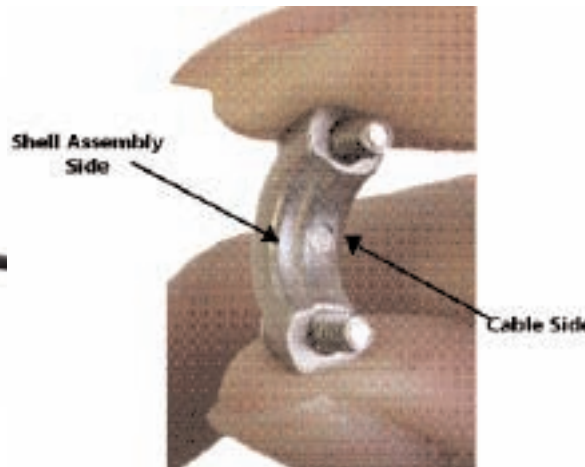
Supporting the insert assembly in one hand, slide the insulator tube and shell assembly into position, as shown.



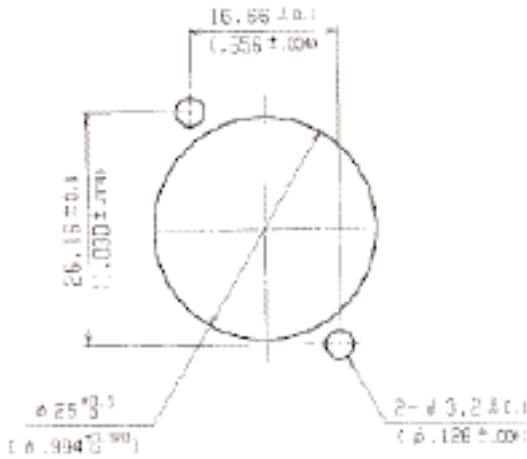
Once assembled, fasten shell assembly with screw and washer. Please make sure to use washer with screw.



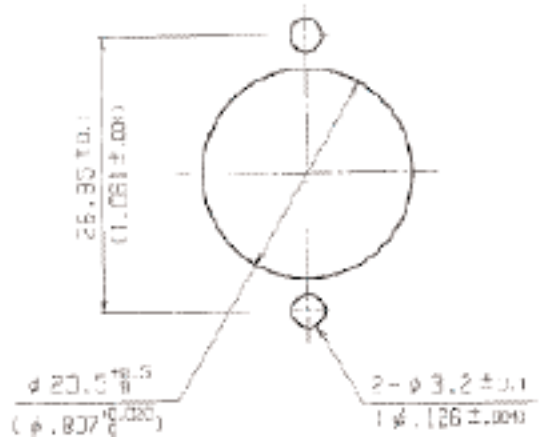
Finally, screw clamp onto the shell assembly to lock cable into position. Please take extra precaution to orientate clamp into its proper position. The inside chamfer with the largest diameter must butt against the shell assembly. Perform a light pull test and visually inspect finished assembly.



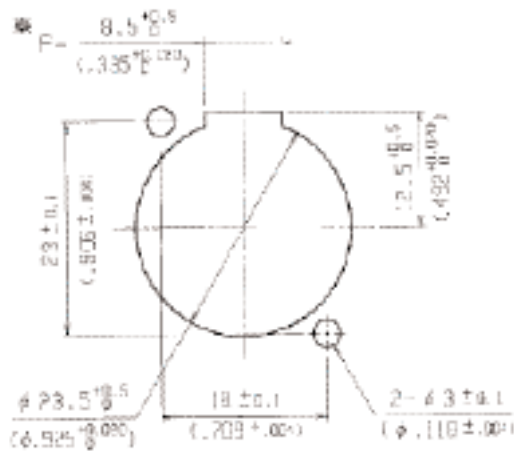
XLR Panel Cutouts



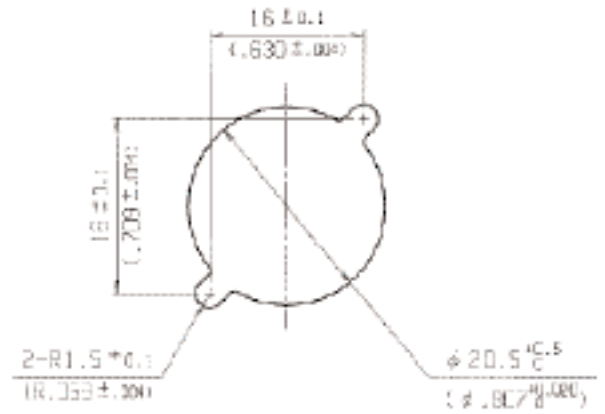
XLR-31



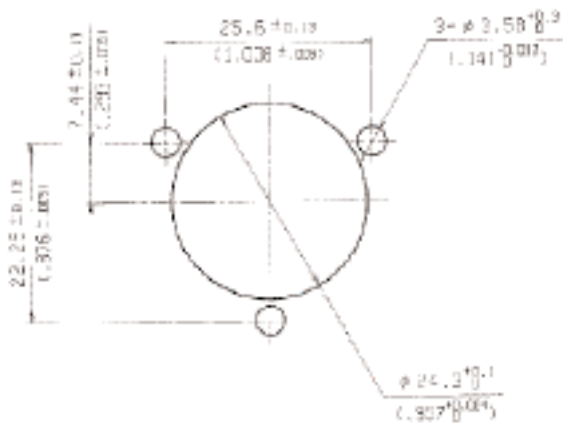
XLR-32



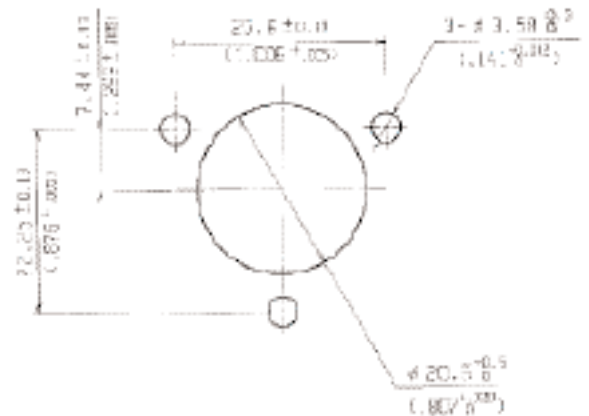
XLR-31/32-F77



XLR-32-F512



XLR-13



XLR-14

XLM- Printed Circuit Board Series General Performance Characteristics

ITT's XLM male and female PCB metal flange mount receptacles offer durability, reliability, space savings and greatly improved EMI shielding over our plastic XLB-PCB connectors. Ease of installation is enhanced since the grounding terminal can be used to temporarily fasten the connector to the circuit board during assembly. The XLM-PCB connectors are interchangeable and intermateable with our XLR series. All XLM-PCB connectors are RoHS Compliant.



Applications

- Amplifiers
- Equalizers
- Mixers
- Medical Electronics
- Recording Equipment
- Test Instruments
- Industrial Control Devices
- Microphones
- TV Cameras

Product Features and Benefits

- PCB mount type with metal shell and barrel made as one piece
- Nylon or PBT insulator (UL94V-O)
- Improved EMI Shielding
- Space saving (smaller flange)
- Snap-in PCB retention feature
- Separate ground contact
- Quick disconnect latch lock
- Interchangeable and Intermateable with XLR Series

Performance Specifications

Temperature Rating	-35°C to +85°C	Insulation Resistance	5,000MΩ min at 500 VDC
Number of Contacts	3	Durability Cycles	500 Mating Cycles
Rated Current	3A	Contact Resistance	PCS: 20mΩmax
Rated Voltage(AC)	133V		PCV: 30mΩmax
Dielectric Withstanding Voltage (AC)	1,400V		PCH: 50mΩmax

Materials and Finishes

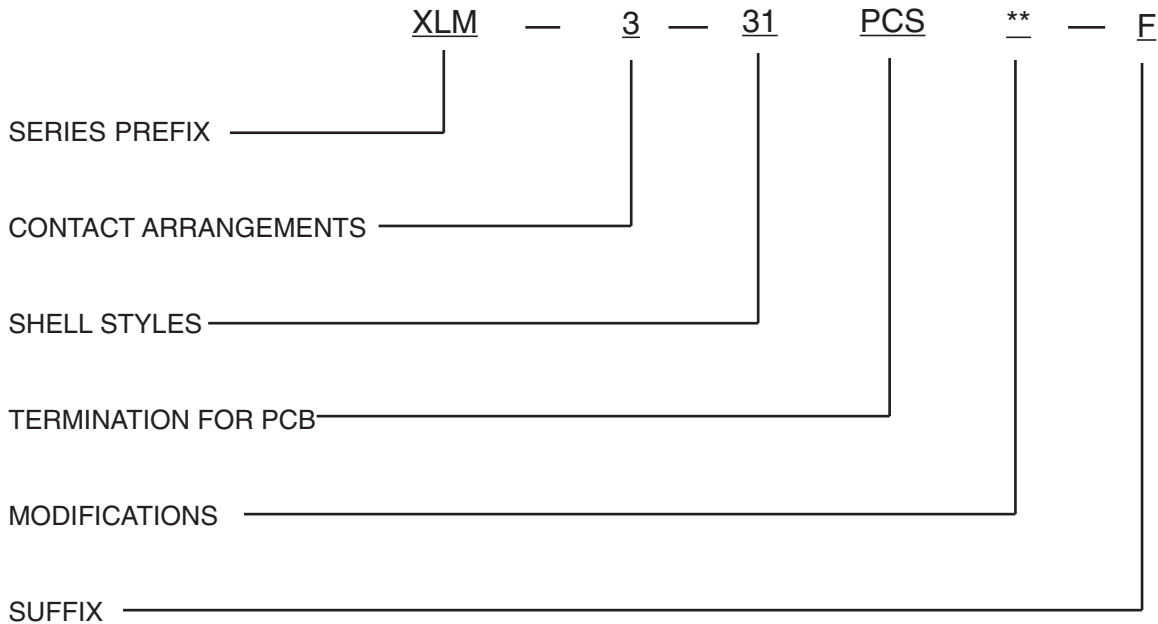
Description	Material	Finish/Treatment
Female Contacts	Copper Alloy	Silver or Gold
Male Contacts	Copper Alloy	Silver or Gold
Insulator	Nylon or PBT	-
Shell/Barrel	Zinc Alloy	Nickel
Grounding Lug	Copper Alloy	Tin
Latch Lever	Steel	Nickel



Dimensions shown in mm (inch)
Specifications and dimensions subject to change

www.ittcannon.com

XLM-PCB Part Number Selection Guide



CONNECTOR SERIES

XLM

CONTACT ARRANGEMENTS

See below 3 pins only

SHELL STYLE

- 31 - Female Rectangular Flange Receptacle
- 32 - Male Rectangular Flange Receptacle

TERMINATION FOR PCB

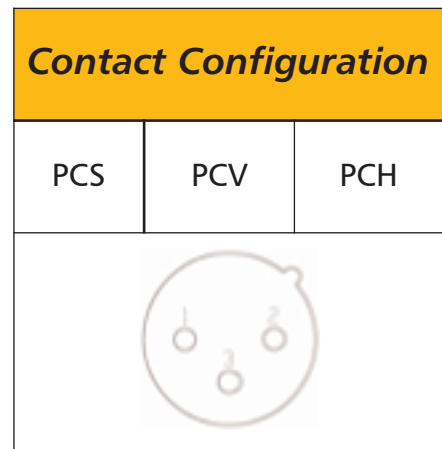
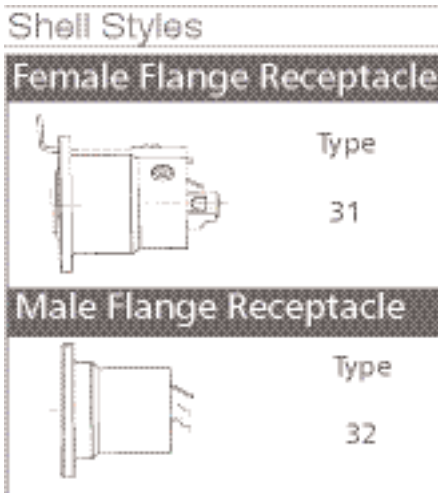
- PCS - Straight Termination
- PCV - Vertical 90° Termination
- PCH-L - Horizontal Left Side Termination (rear view)
- PCH-R - Horizontal Right Side Termination (rear view)

MODIFICATIONS

A176 - Gold plated contacts (for 3 pins)

SUFFIX

“F” to identify lead free products
XLM series products are RoHS compliant

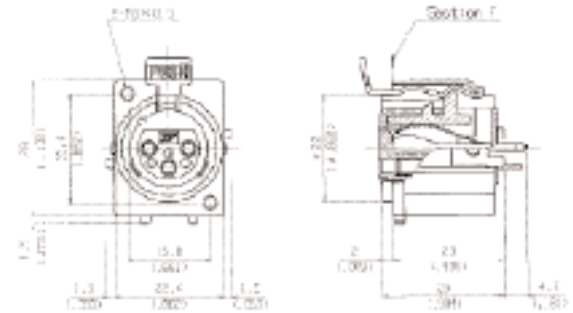


Dimensions shown in mm (inch)
Specifications and dimensions subject to change

XLM-PCB Female Flange Receptacles

Straight Termination

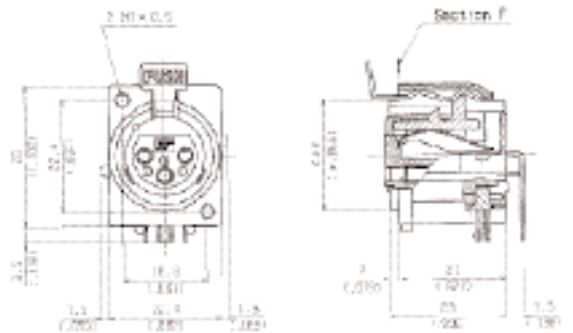
XLM-3-31PCS-F



See page 27 for panel cutouts and PCB Layouts.
See page 22 for latch lever assembly/removal instructions.

Vertical 90° Termination

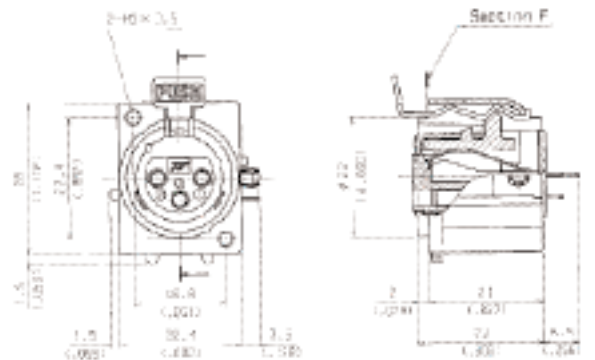
XLM-3-31-PCV-F



See page 27 for panel cutouts and PCB Layouts.
See page 22 for latch lever assembly/removal instructions.

Horizontal Left Side Termination

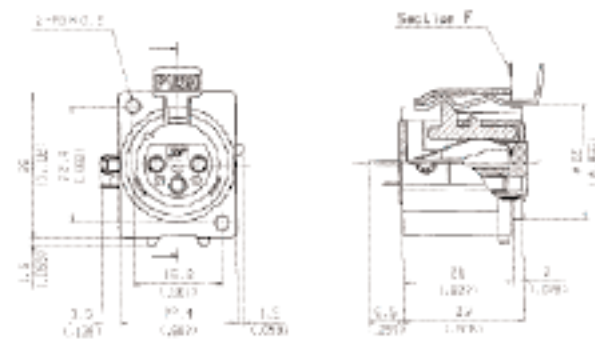
XLM-3-31PCH-L-F



See page 27 for panel cutouts and PCB Layouts.
See page 22 for latch lever assembly/removal instructions.

Horizontal Right Side Termination

XLM-3-31PCH-R-F



See page 27 for panel cutouts and PCB Layouts.
See page 22 for latch lever assembly/removal instructions.

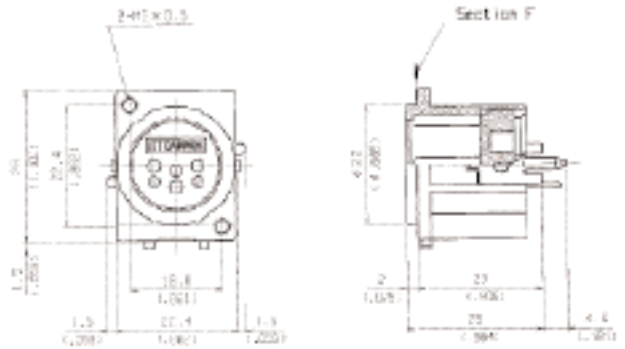
Note: Section F referenced on line drawing refers to position of flange front face.



XLM-PCB Male Flange Receptacles

Straight Termination

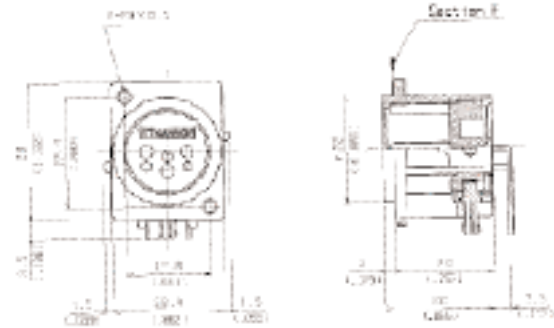
XLM-3-32PCS-F



See page 27 for panel cutouts and PCB Layouts.

Vertical 90° Termination

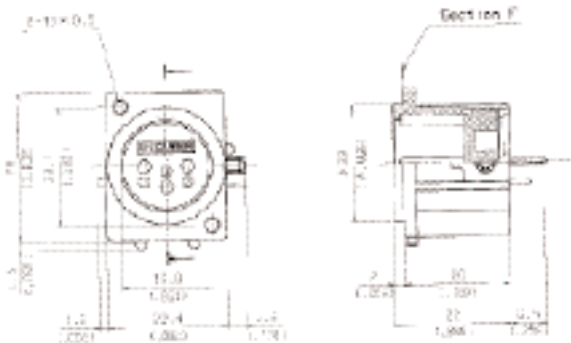
XLM-3-32-PCV-F



See page 27 for panel cutouts and PCB Layouts.

Horizontal Left Side Termination

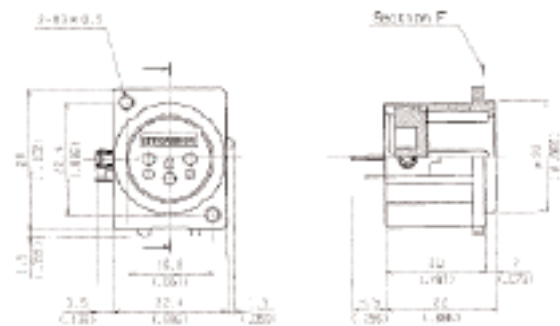
XLM-3-32PCH-L-F



See page 27 for panel cutouts and PCB Layouts.

Horizontal Right Side Termination

XLM-3-32PCH-R-F



Note: Section F referenced on line drawing refers to position of flange front face.

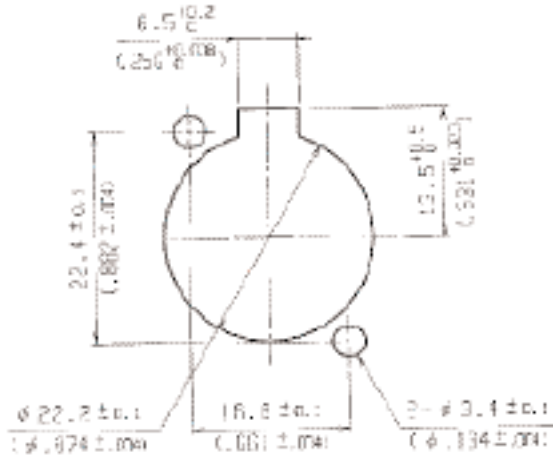
See page 27 for panel cutouts and PCB Layouts.

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

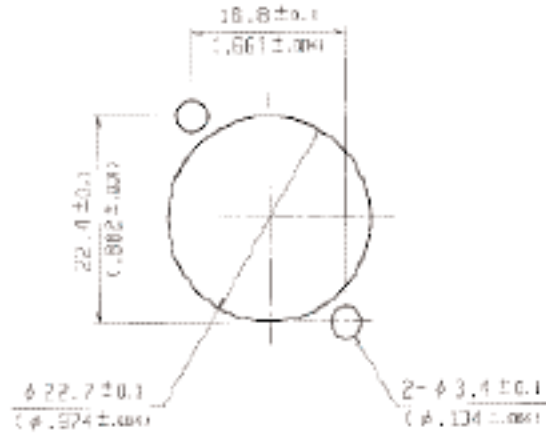
www.ittcannon.com



XLM-PCB Panel Cutouts

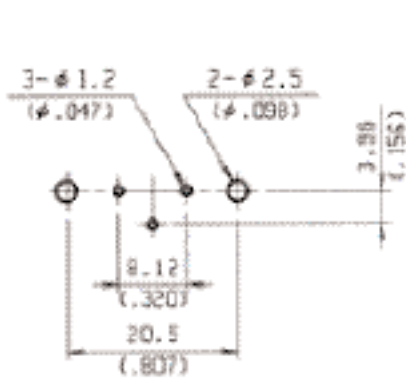


XLM-3-31PCS-F/PCV-F/PCH-L or R-F

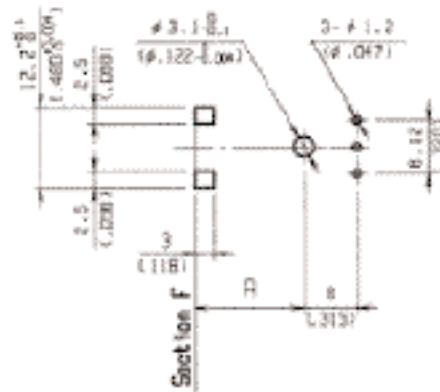


XLM-3-32PCS-F/PCV-F/PCH-L or R-F

Printed Circuit Board Hole Patterns (Ref.)

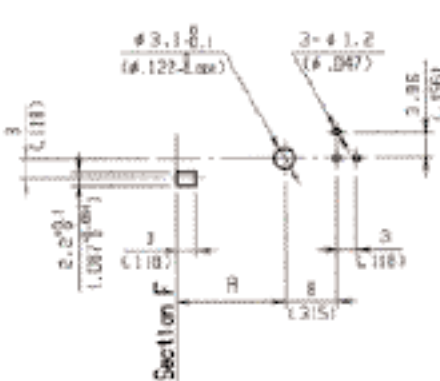


XLM-3-31/32PCS-F



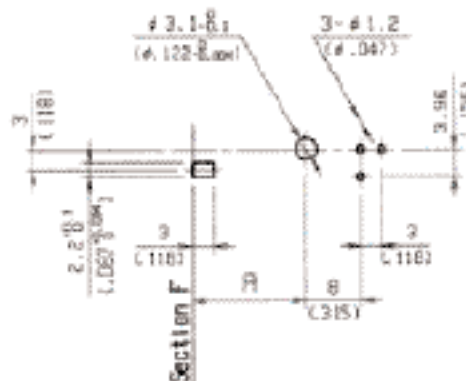
A=XLM-3-31 → 16.5mm (0.650 inch) XLM-3-32 → 15.5mm (0.610 inch)

XLM-3-31/32PCV-F



A=XLM-3-31 → 16.5mm (0.650 inch) XLM-3-32 → 15.5mm (0.610 inch)

XLM-3-31/32PCH-L-F



A=XLM-3-31 → 16.5mm (0.650 inch) XLM-3-32 → 15.5mm (0.610 inch)

XLM-3-31/32PCH-R-F

Note: See page 22 for Latch Lever installation and removal instructions.



Mini-XL General Performance Characteristics

The world’s most sophisticated video, broadcast, and recording equipment require audio connector solutions with high reliability, unparallel performance, and robust durability. ITT Cannon is pleased to introduce the Mini-XL audio connector series. The Mini-XL connector is **40% smaller** than the industries standard XLR connector. Intended to meet the demands for high density compact audio applications, this quick one touch connect/disconnect circular connector is designed to withstand extreme field use. All Mini-XL connects are RoHS compliant.



Applications

- Amplifiers
- Equalizers
- Mixers
- Medical Electronics
- Recording Equipment
- Test Instruments
- Industrial Control Devices
- Microphones
- TV Cameras

Product Features and Benefits

- Rugged design to withstand extreme field use
- Resilient socket insulator which minimizes vibration and electrical noise
- Quick disconnect latch lock
- Low reflectivity satin finish
- 40% smaller than standard XLR
- Ideal for high density applications
- Contacts are gold plated

Performance Specifications

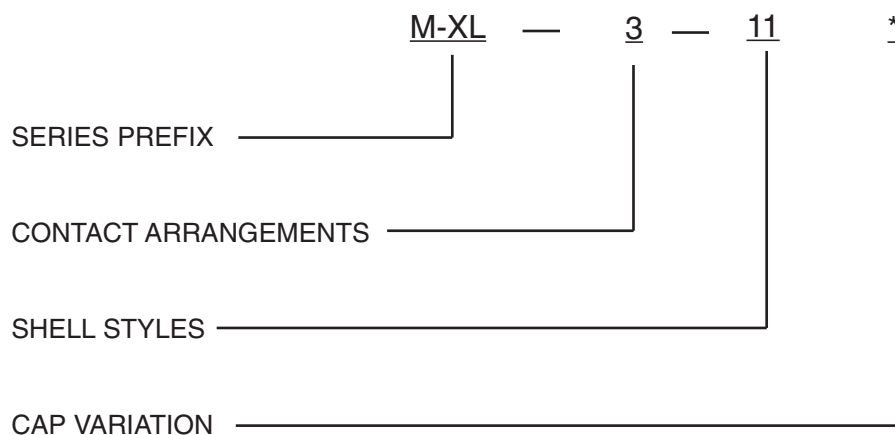
Temperature Rating	-35°C to +85°C	Insulation Resistance	5,000MΩ min at 500 VDC
Number of Contacts	3 to 6	Durability Cycles	500 Mating Cycles
Rated Current	3A	Contact Resistance	30mΩmax
Rated Voltage(AC)	125V	Wire Accommodation Reference AWG (Max)	#24
Dielectric Withstanding Voltage (AC)	250V	Wire Cross Selection (Max)	0.2mm

Materials and Finishes

Description	Material	Finish/Treatment
Contacts	Copper Alloy	Gold
Insulator	PPS	-
Shell	Copper Alloy	Nickel
Barrel	Copper Alloy	Nickel
Bushing	Thermo-plastic Vulcanizates	-
Latch Lever	Steel	Nickel

Dimensions shown in mm (inch)
 Specifications and dimensions subject to change

Mini-XL Part Number Selection Guide



CONNECTOR SERIES

Mini-XL

NUMBER OF CONTACTS

See Below 3,4,5,6

SHELL STYLE

- 11 - Female Plug
- 12 - Male Plug
- 14 - Male Round Flange Receptacle
- 31 - Female Rectangular Flange Receptacle

CAP VARIATION

- S - Small Cap with Bushing (Standard)
- L - Large Cap
- M - Metal Cap

Mini-XL series products are RoHS compliant

Shell Styles

Female Plug	
	Type+ 11*
*Cap shown 12 S type	
Male Plug	
	Type+ 12*
*Cap shown 11 S type	
Male Flange Receptacle	
	Type+ 14
Female Rectangular Flange Receptacle	
	Type+ 31

Series Variations

Series/Shell Styles	Contact Arrangements				
	3	4	5	6	
Mini-XL	11	★	★	★	★
	12	★	★	★	★
	14	★	★	★	★
	31	★	★	★	★

Contact Configuration

Number of Contacts	3	4	5	6
Contact Arrangements				
Wire AWG Max	#24	#24	#24	#24
Wire Cross Section Max	0.2mm ²	0.2mm ²	0.2mm ²	0.2mm ²

Mini-XL connects are not intermatable with standard XLR, XLB-PCB, XLM-PCB connectors.



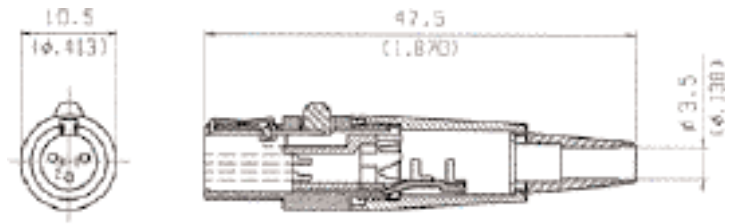
Dimensions shown in mm (inch)
Specifications and dimensions subject to change

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Mini-XL Female Plug

Small Cap with Bushing (Standard)

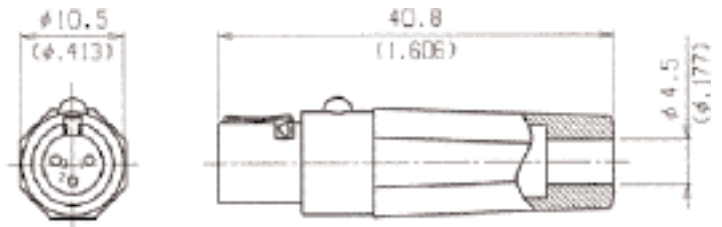
M-XL- * - 11S



See page 33 for assembly instructions

Large Cap

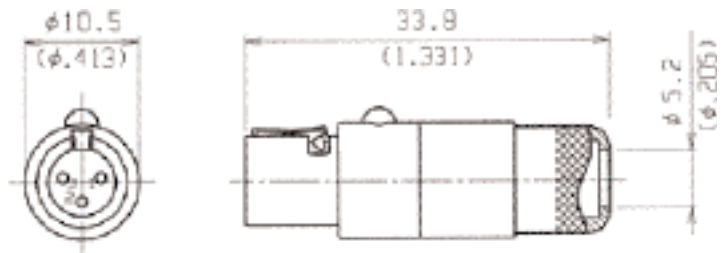
M-XL- * - 11L



See page 33 for assembly instructions

Metal Cap

M-XL- * - 11M

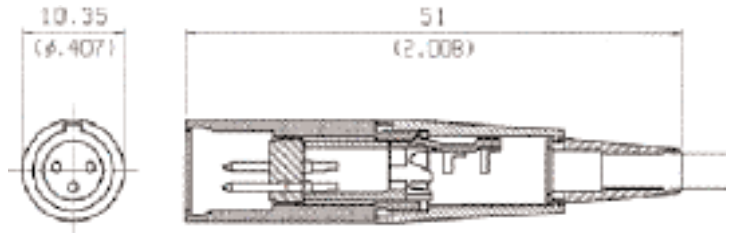


See page 33 for assembly instructions

Mini-XL Male Plug

Small Cap with Bushing (Standard)

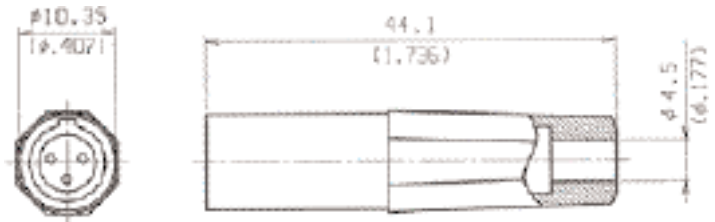
M-XL- * - 12S



See page 33 for assembly instructions

Large Cap

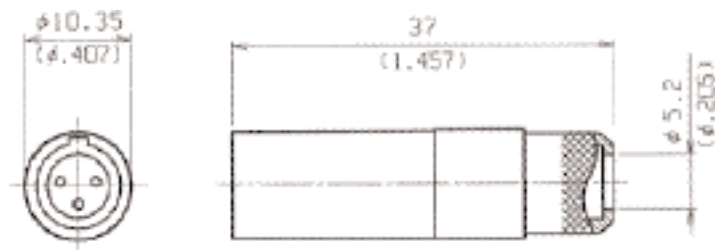
M-XL- * - 12L



See page 33 for assembly instructions

Metal Cap

M-XL- * - 12M



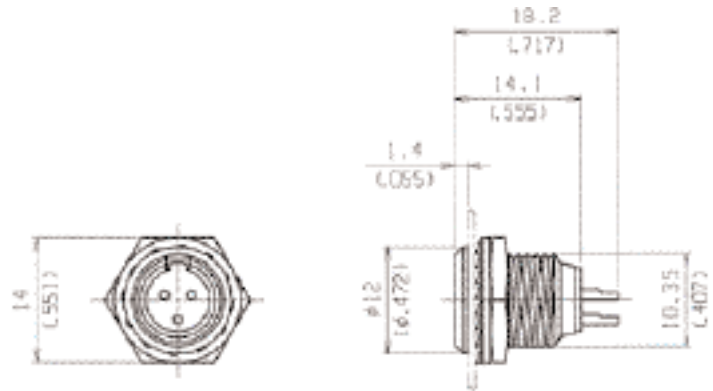
See page 33 for assembly instructions



Mini-XL Flange Receptacles

Male Round Flange Receptacle

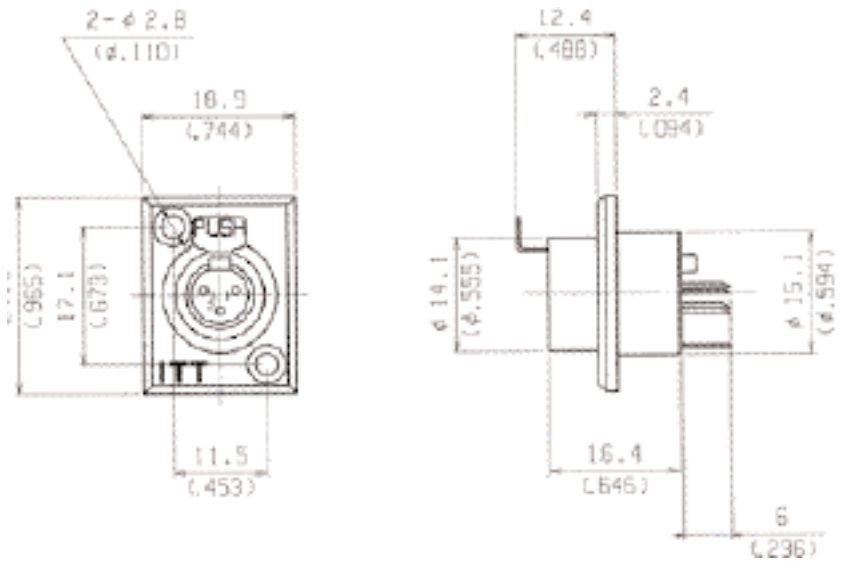
M-XL- * - 14



See page 35 for panel cutouts.

Female Rectangular Flange Receptacle

M-XL- * - 31



See page 35 for panel cutouts.

Note: Latch Lever is not removable.