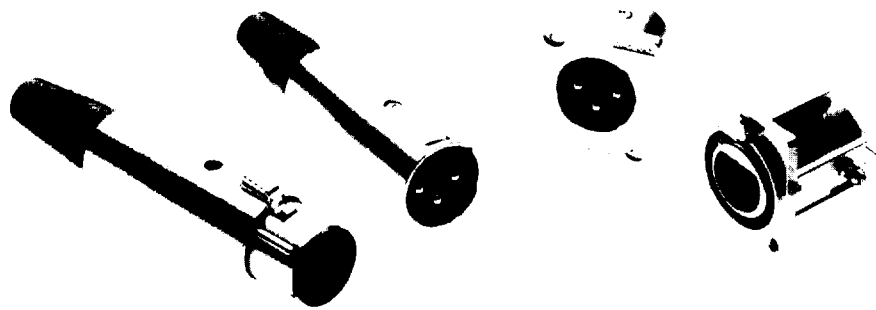


# Audio Connectors

ITT Cannon offers the broadest line of Audio connectors in the industry today. Our connectors have been designed specifically to meet all of the performance and budgetary requirements of the Audio industry. In addition, the entire ITT Cannon Audio product line is manufactured to the highest quality standards.

- XLR:** High Performance
- XLB2:** Low Cost/Streamlined Shell
- XLA:** Low Cost/XLR Style Shell
- XLB-PC:** Plastic PCB Mount
- XLM:** Metal PCB Mount



## Performance Specifications

|                                       |                                     |              |              |              |              |              |              |
|---------------------------------------|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Number of Contacts                    | 2                                   | 3            | 4            | 5            | 6            | 6            | 7            |
| Contact Arrangement Designator        | 2A                                  | 3            | 4            | 5            | 6            | 6A           | 7            |
| Contact Arrangement Configuration     |                                     |              |              |              |              |              |              |
| Rated current                         | 15A                                 | (*) 10A      | 10A          | 7.5A         | 7.5A         | 7.5A         | 5A           |
| Service voltage (VAC)                 | 200V                                | 133V         | 133V         | 133V         | 133V         | 133V         | 133V         |
| Dielectric withstanding Voltage (VAC) | 1600V                               | 1400V        | 1400V        | 1400V        | 1400V        | 1400V        | 1400V        |
| Insulation resistance                 | 5,000M $\Omega$ min. at 500VDC      |              |              |              |              |              |              |
| Contact resistance (max.)             |                                     | (*)          |              |              |              |              |              |
| XLB2/XLA                              | 10m $\Omega$                        | 10m $\Omega$ | 13m $\Omega$ | 15m $\Omega$ | —            | 15m $\Omega$ | 15m $\Omega$ |
| XLR                                   | 5m $\Omega$                         | 5m $\Omega$  | 5m $\Omega$  | 10m $\Omega$ | 10m $\Omega$ | 10m $\Omega$ | 10m $\Omega$ |
| Operating temperature                 | 35°C ~ + 85°C (XLR); 55°C ~ + 125°C |              |              |              |              |              |              |
| Wire Accommodation Reference AWG      | #14                                 | #14          | #16          | #18          | #18          | #18          | #20          |
| Stranded wire O.D. (max.)             | 2.1mm (.083)                        | 2.1mm (.083) | 1.6mm (.063) | 1.4mm (.055) | 1.4mm (.055) | 1.4mm (.055) | 1.0mm (.039) |

(\*) XLR : 15A  
XLM/XLB-PC : 3A

(\*) PCS: 20m $\Omega$  max.  
PCV: 30m $\Omega$  max.  
PCH: 50m $\Omega$  max.

**HIGH PERFORMANCE**

- Resilient insulator minimizes vibration and electrical noise
- Quick disconnect latch
- Rugged design withstands extreme field use
- Screw machined contacts maximize performance
- Low reflectivity satin finish

**APPLICATIONS**

- Microphones
- Test Instruments
- Mixers
- D/C Converters
- Amplifiers
- TV Cameras
- Speakers
- VCRs
- Medical Instruments
- Tuners
- Equalizers

**Performance and Material Specifications****SPECIFICATIONS (Detail Page 158)**

|                                 |                               |
|---------------------------------|-------------------------------|
| Rated Current                   | 5A ~ 15A                      |
| Service Voltage                 | 133VAC                        |
| Dielectric Withstanding Voltage | 1400VAC                       |
| Insulation Resistance           | 5000M $\Omega$ min. at 500VDC |

**MATERIALS & FINISHES**

|           |                                     |
|-----------|-------------------------------------|
| Contacts  | Copper Alloy/Silver Plating         |
| Insulator | Socket: Resilient<br>Pin: Nylon     |
| Shell     | Aluminum Alloy, Satin Nickel Finish |
| Barrel    | Steel                               |
| Bushing   | Resilient                           |

**How to Order**

XLR - 3 - 11C - \*\*

**SERIES PREFIX****CONTACT ARRANGEMENTS****SHELL STYLES****MODIFICATIONS****SERIES PREFIX**

XLR

**CONTACT ARRANGEMENTS**

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

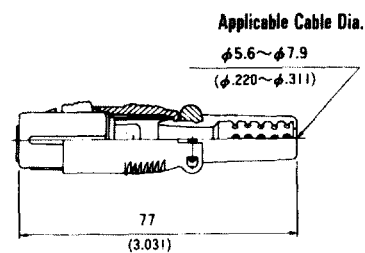
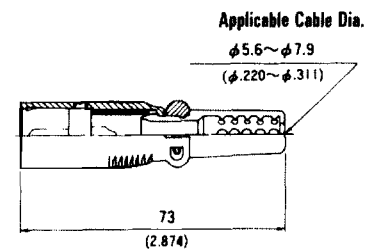
**SHELL STYLES**

- 11C - Straight Plug, Socket Contacts
- 12C - Straight Plug, Pin Contacts
- 13 - Round Flange Receptacle, Socket Contacts
- 14 - Round Flange Receptacle, Pin Contacts
- 31 - Rectangular Flange Receptacle, Socket Contacts
- 32 - Rectangular Flange Receptacle, Pin Contacts

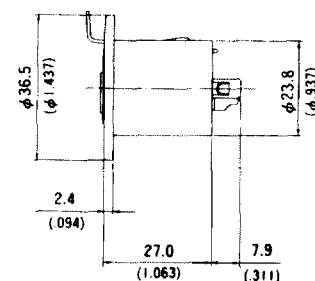
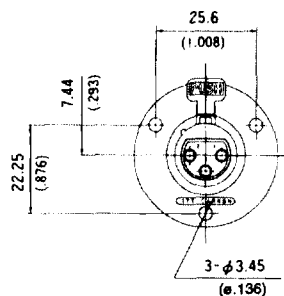
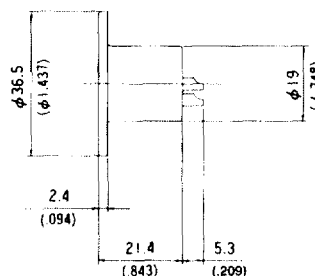
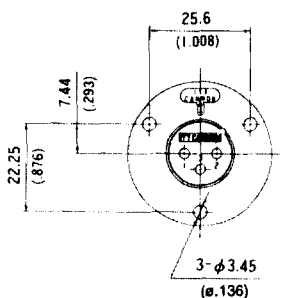
**MODIFICATIONS**

- F77 - Rectangular Small Flange (Receptacle 31 and 32)
- F512 - Rectangular Mini-Flange (Receptacle 32 only)
- A176 - Gold Plated Contacts

## Plug

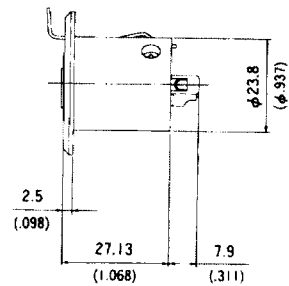
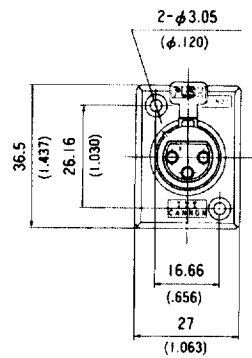
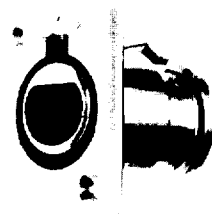
Straight Plug, Socket Contacts  
XLR-3-11CStraight Plug, Pin Contacts  
XLR-3-12C

## Receptacle

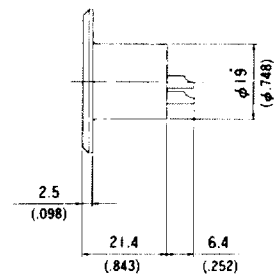
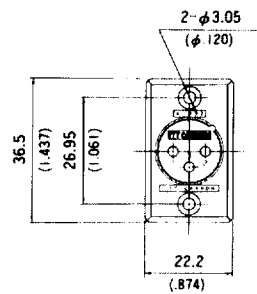
Round Flange Receptacle, Socket Contacts  
XLR-3-13Round Flange Receptacle, Pin Contacts  
XLR-3-14

Receptacle

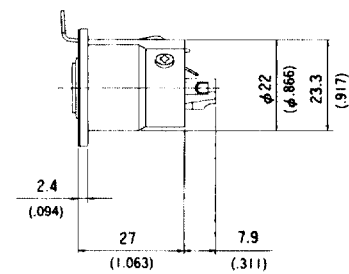
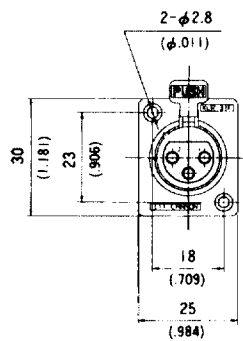
Large Flange Receptacle, Socket Contacts  
LR-3-31



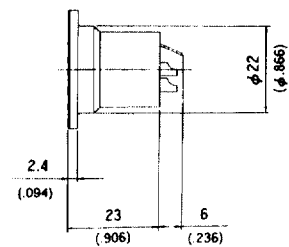
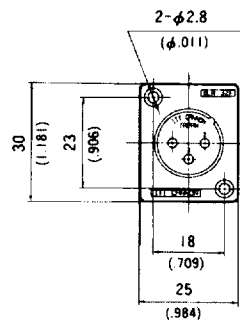
Large Flange Receptacle, Pin Contacts  
XLR-3-32



Small Flange Receptacle, Socket Contacts  
XLR-3-31-F77

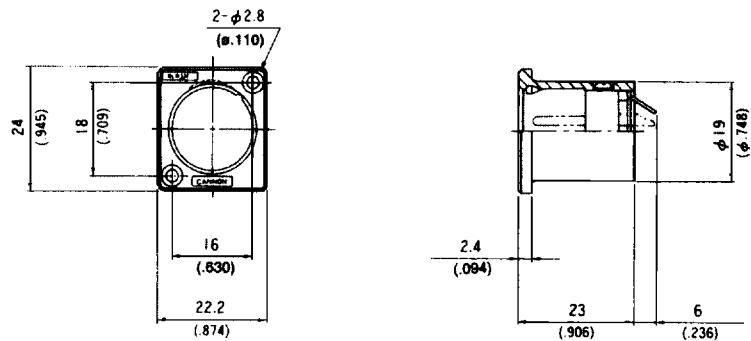


Small Flange Receptacle, Pin Contacts  
XLR-3-32-F77



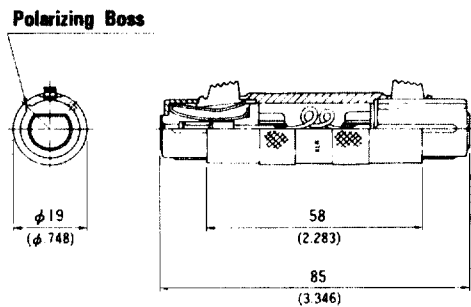
Receptacle

Miniature Flange Receptacle, Pin Contacts  
XLR-32-F512

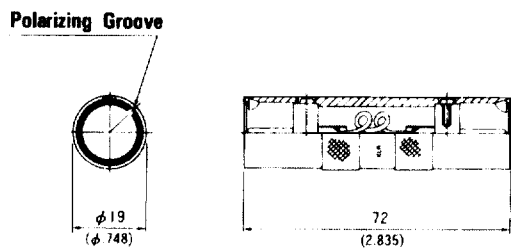


Thru-Bulkhead

Thru-Bulkhead, Socket Contacts Both Ends  
XLR-11-11



Thru-Bulkhead, Pin Contacts Both Ends  
XLR-12-12



Dust Caps

|                                     | Plastic<br>Part Number                                                                         | Metallic<br>Part Number                                                                          | For use with<br>(Shell Styles)                              |
|-------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| For<br>Socket Contact<br>Connectors | <br>XLR-SDC | <br>XLR-13RC | 11, 11B, 11C,<br>13, 31, 31B,<br>41, 41B, 31-F77            |
| For<br>Pin Contact<br>Connectors    | <br>XLR-PDC | <br>XLR-14PC | 12, 12B, 12C,<br>14, 32, 32B,<br>42, 42B, 31-F77<br>32-F512 |

FEATURES:

- Low Cost
- Streamlined Shell Design
- Internal Cable Clamp
- A Single Captive Screw Eases Assembly
- Quick Disconnect Latch
- Stamped and Formed Contacts
- Low Reflectivity Satin Finish

APPLICATIONS

- Microphones
- Tuners
- Medical Instruments
- VCRs
- Speakers
- Amplifiers
- Mixers
- Equalizers
- TV Cameras
- D/C Converters
- Test Instruments

Performance and Material Specifications

SPECIFICATIONS (Detail Page 158)

|                                 |                               |
|---------------------------------|-------------------------------|
| Rated Current                   | 5A ~ 15A                      |
| Service Voltage                 | 133VAC                        |
| Dielectric Withstanding Voltage | 1400VAC                       |
| Insulation Resistance           | 5000M $\Omega$ min. at 500VDC |

MATERIALS and FINISHES

|           |                            |                         |
|-----------|----------------------------|-------------------------|
| Contacts  | Copper Alloy Silver Plated |                         |
| Insulator | Socket:                    | PBT Glass-filled        |
|           | Pin:                       | Nylon                   |
| Shell     | 11/12/31/32                | Zinc Alloy (Nickel)     |
|           | 41/42                      | Aluminum Alloy (Nickel) |
| Barrel    | Steel                      |                         |
| Bushing   | PVC                        |                         |

How to Order

XLB2 - 3 - 11

SERIES PREFIX

CONTACT ARRANGEMENTS

SHELL STYLES

SERIES PREFIX  
XLB2

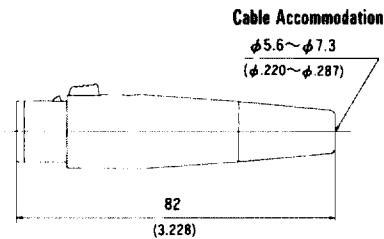
CONTACT ARRANGEMENTS  
2A, 3, 4, 5, 6A, 7

SHELL STYLES  
11 - Straight Plug, Socket Contacts  
12 - Straight Plug, Pin Contacts  
31 - Rectangular Flange Receptacle, Socket Contacts  
32 - Rectangular Flange Receptacle, Pin Contacts  
41 - Small Flange Receptacle, Socket Contacts  
42 - Small Flange Receptacle, Pin Contacts

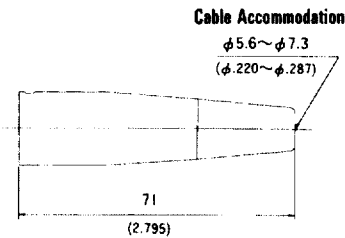
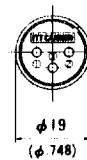
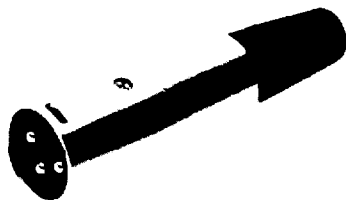
NOTE: Black Shell with Gold Flash contacts available, consult factory.

Plug

Straight Plug, Socket Contacts  
XLB2-3-11

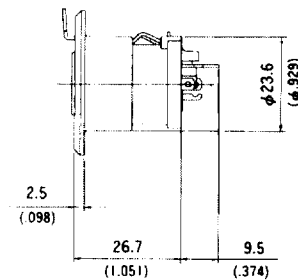
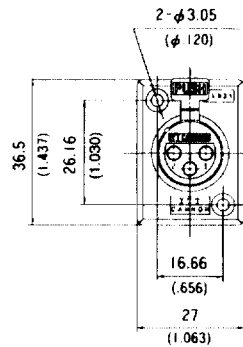
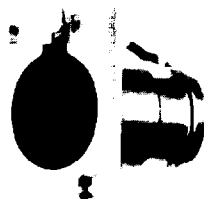


Straight Plug, Pin Contacts  
XLB2-3-12

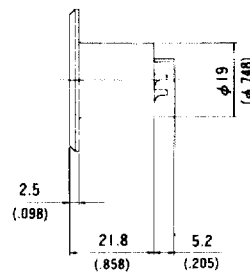
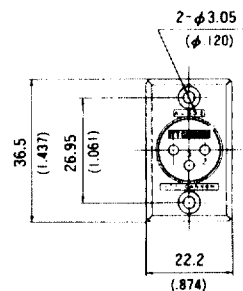


Receptacle

Large Flange Receptacle, Socket Contacts  
XLB2-3-31

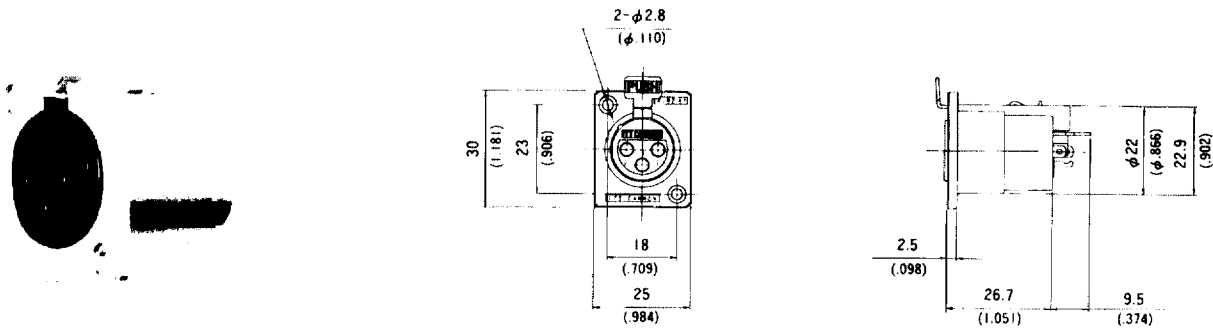


Large Flange Receptacle, Pin Contacts  
XLB2-3-32

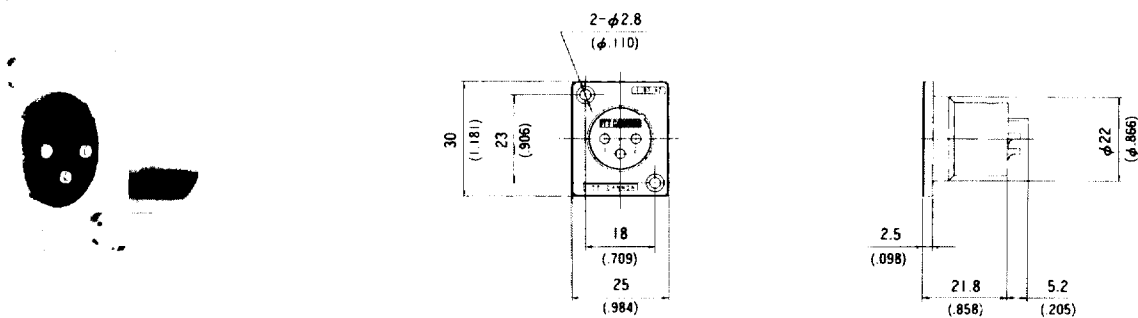


Receptacles

Small Flange Receptacle, Socket Contacts  
XLB2-3-41



Small Flange Receptacle, Pin Contacts  
XLB2-3-42



FEATURES:

- Low Cost
- Stamped & Formed Contacts
- Internal Grounding Lug
- XLR Shell Design
- Thermoplastic Insulator

APPLICATIONS

- Microphones
- Audio Interconnecting Cables
- Test Instruments

Performance and Material Specifications

SPECIFICATIONS (Detail Page 158)

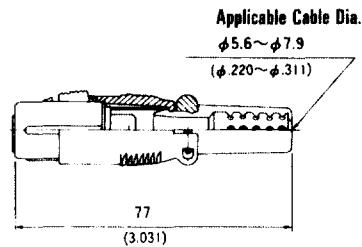
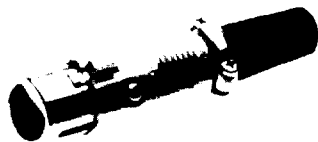
|                                 |                                     |
|---------------------------------|-------------------------------------|
| Rated Current                   | 3 contacts; 10A<br>5 contacts; 7.5A |
| Service Voltage                 | 133VAC                              |
| Dielectric Withstanding Voltage | 1400VAC                             |
| Insulation Resistance           | 5000M $\Omega$ min. at 500VDC       |

MATERIALS AND FINISHES

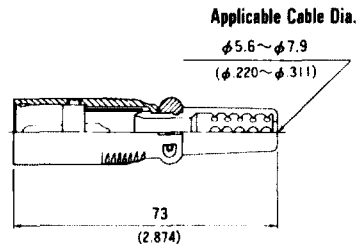
|           |                                        |
|-----------|----------------------------------------|
| Contacts  | Copper Alloy/Silver Plated             |
| Insulator | Socket: PBT Glass-Filled<br>Pin: Nylon |
| Shell     | Zinc Alloy, Nickel Plated              |
| Barrel    | Stainless Steel                        |
| Bushing   | Resilient                              |

Plug

Straight Plug, Socket Contacts  
XLA-3-11C  
XLA-5-11C



Straight Plug, Pin Contacts  
XLA-3-12C



FEATURES:

- Thermoplastic Insulator (UL 94V-0)
- Stamped & Formed Contacts
- Optional Grounding Lug
- Wave Solderable
- Quick Disconnect Latch Lock

APPLICATIONS

- Amplifiers
- Computers
- Equalizers
- Peripheral Devices
- Audio Mixer
- Medical Electronics
- Communications
- Test Instruments

Performance and Material Specifications

SPECIFICATIONS (Detail Page 158)

|                                 |                               |
|---------------------------------|-------------------------------|
| Rated Current                   | 3A                            |
| Service Voltage                 | 133VAC                        |
| Dielectric Withstanding Voltage | 1400VAC                       |
| Insulation Resistance           | 5000M $\Omega$ min. at 500VDC |

MATERIALS AND FINISHES

|           |                           |
|-----------|---------------------------|
| Contacts  | Copper Alloy, Gold Plated |
| Insulator | Nylon                     |
| Shell     | Nylon                     |
| Barrel    | Stainless Steel           |

How to Order

XLB - 3 - 31 - PCS - \*

SERIES PREFIX \_\_\_\_\_

CONTACT ARRANGEMENTS \_\_\_\_\_

SHELL STYLES \_\_\_\_\_

TERMINATION (Printed Circuit Board) \_\_\_\_\_

MODIFICATIONS \_\_\_\_\_

SERIES PREFIX  
XLB

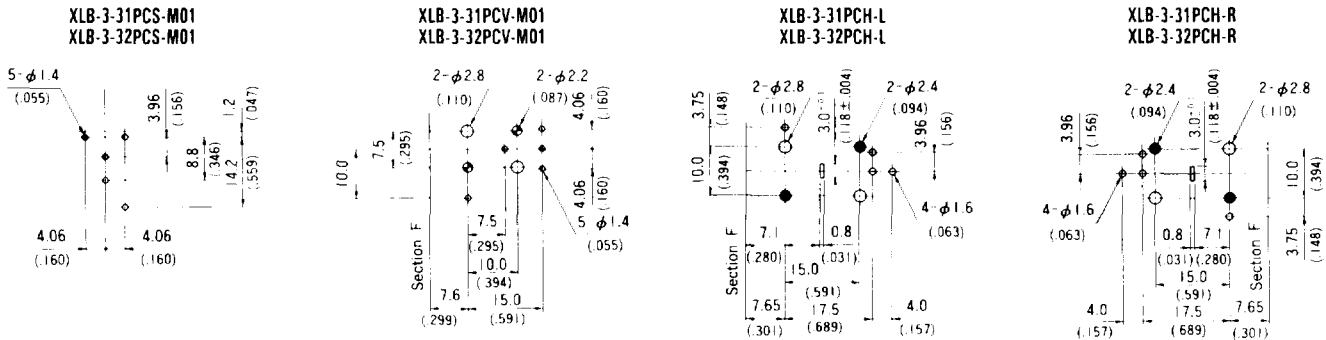
CONTACT ARRANGEMENTS  
3 Position Only

SHELL STYLES  
31    – Rectangular Flange Receptacle, Socket Contacts  
32    – Rectangular Flange Receptacle, Pin Contacts

TERMINATION  
PCS    – Straight Termination  
PCV    – Vertical 90° Termination  
PCH-L    – Horizontal Left Side Termination (Rear View)  
PCH-R    – Horizontal Right Side Termination (Rear View)

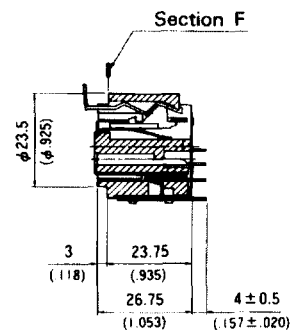
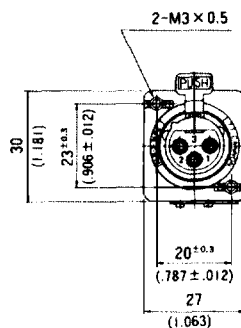
MODIFICATIONS  
M01: With Grounding Lug

PCB Layouts

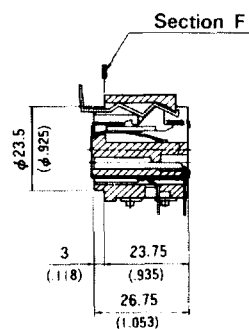
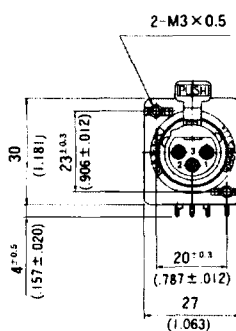
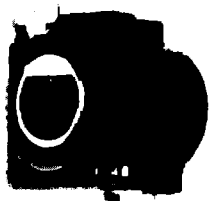


## Socket Contacts, Receptacle

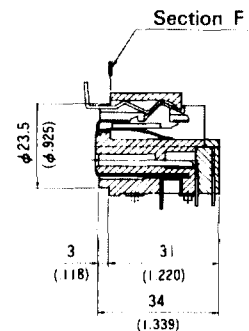
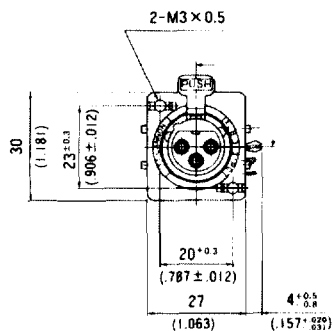
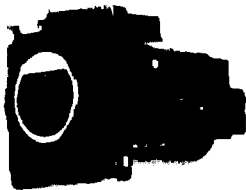
Straight Termination  
XLB-3-31PCS-M01



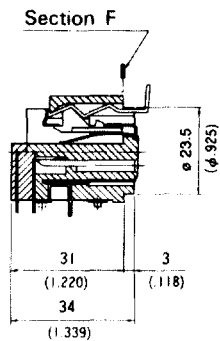
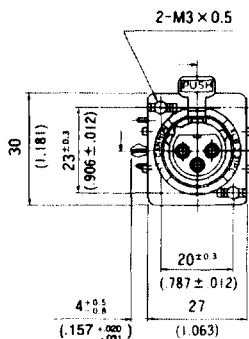
Vertical 90° Termination  
XLB-3-31PCV-M01



Horizontal Left Side Termination (Rear View)  
XLB-3-31-PCH-L

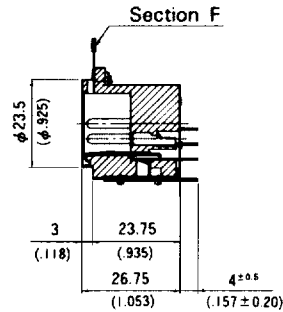
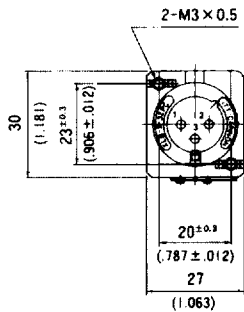


Horizontal Right Side Termination (Rear View)  
XLB-3-31PCH-R

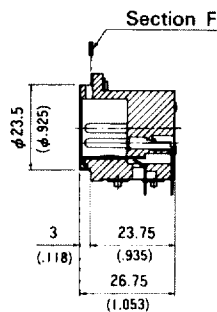
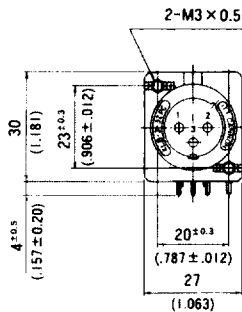
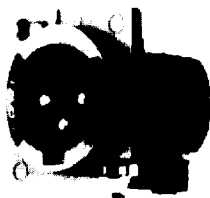


Pin Contacts, Receptacle

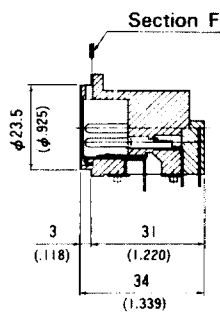
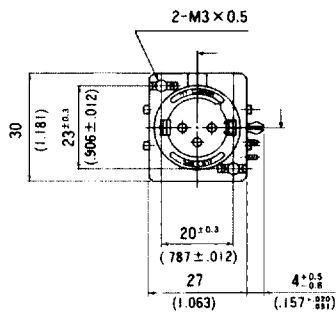
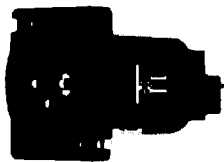
Straight Termination  
XLB-3-32PCS-M01



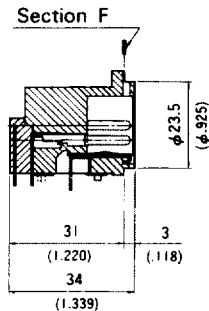
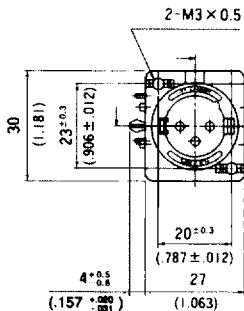
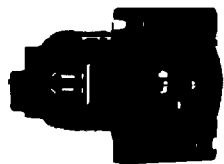
Vertical 90° Termination  
XLB-3-32PCV-M01



Horizontal Left Side Termination (Rear View)  
XLB-3-32PCH-L



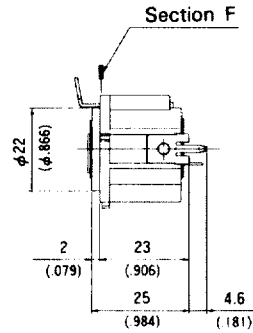
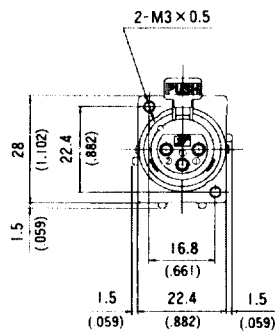
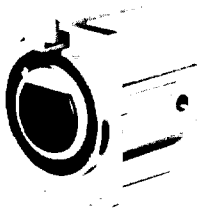
Horizontal Right Side Termination (Rear View)  
XLB-3-32PCH-R



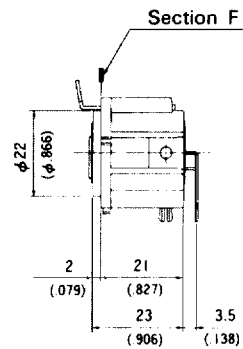
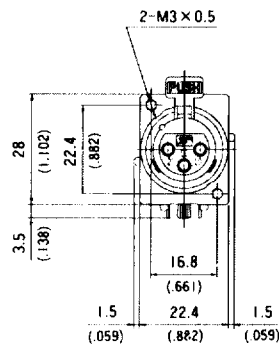
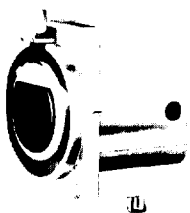


Socket Contacts, Receptacle

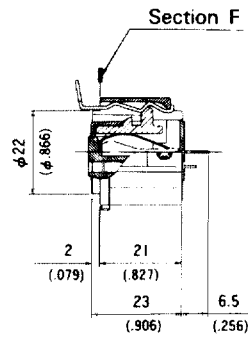
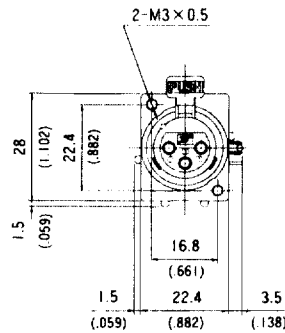
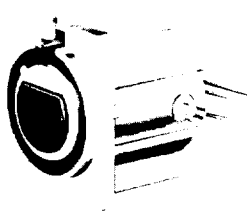
Straight Termination  
XLM-3-31PCS



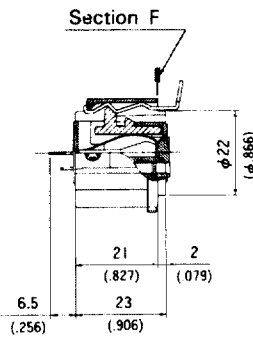
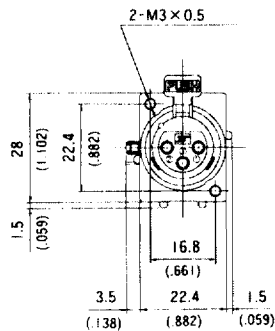
Vertical 90° Termination  
XLM-3-31PCV



Horizontal Left Side Termination (Rear View)  
XLM-3-31PCH-L

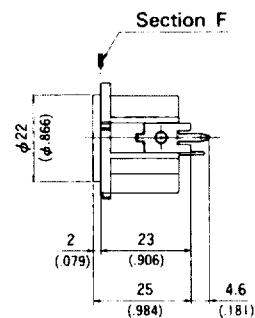
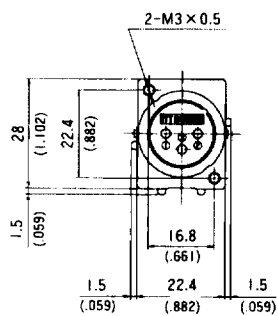
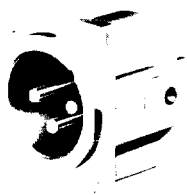


Horizontal Right Side Termination (Rear View)  
XLM-3-31PCH-R

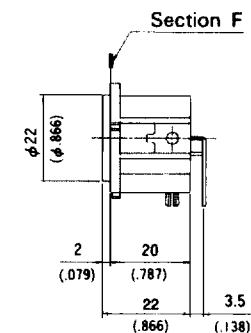
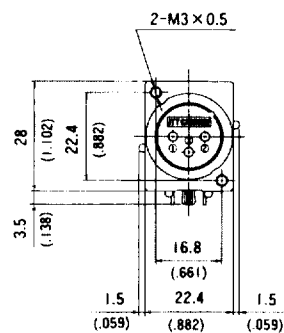
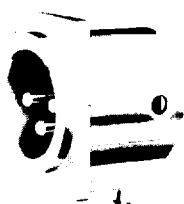


## Pin Contacts, Receptacle

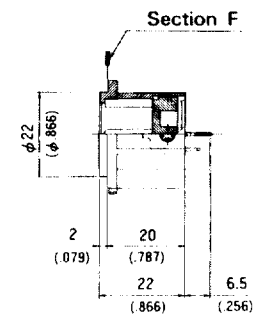
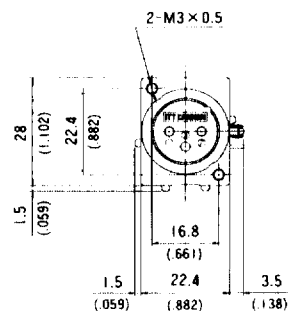
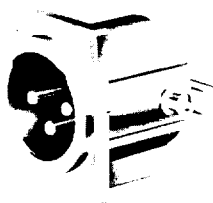
Straight Termination  
XLM-3-32PCS



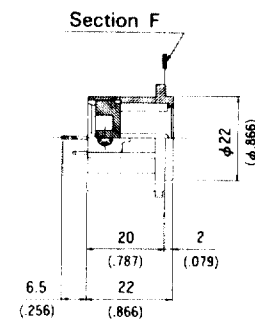
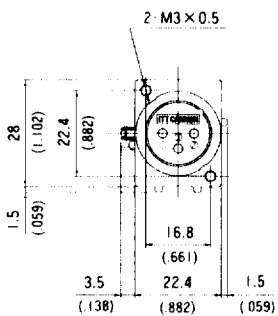
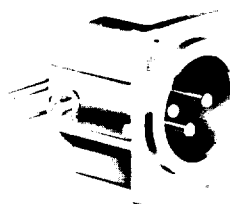
Vertical 90° Termination  
XLM-3-32PCV



Horizontal Left Side Termination (Rear View)  
XLM-3-32PCH-L



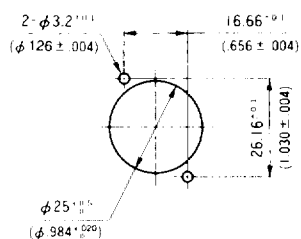
Horizontal Right Side Termination (Rear View)  
XLM-3-32PCH-R



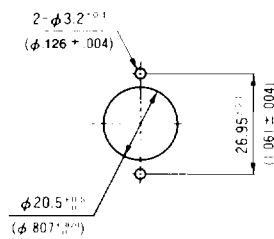
# Audio Connectors

## Panel Cutouts

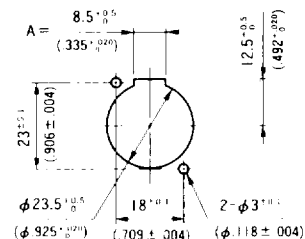
**XLB2-\*-31**  
**XLR-\*-31**



**XLB2-\*-32**  
**XLR-\*-32**

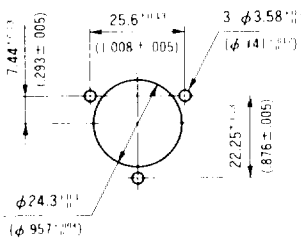


**XLB2-\*-41/42**  
**XLR-\*-31/32\*-F77**

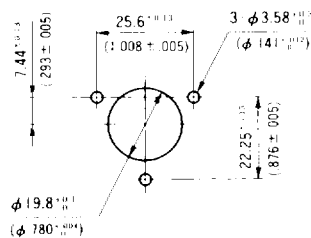


A \* Cutout not required for male versions.

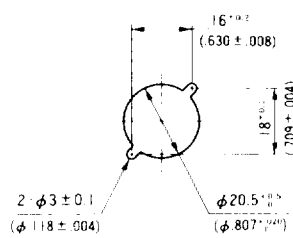
**XLR-\*-13**



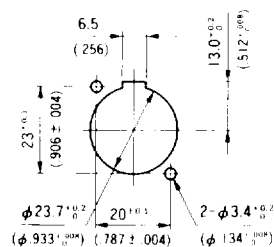
**XLR-\*-14**



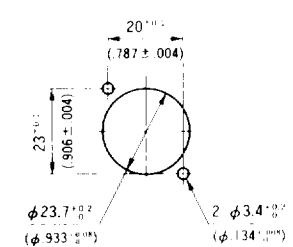
**XLR-\*-F512**



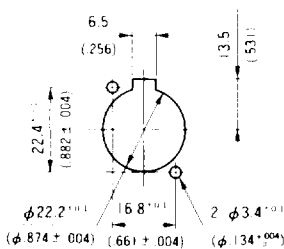
**XLB-3-31PCS/PCV/PCH- $\frac{1}{8}$**



**XLB-3-32PCS/PCV/PCH- $\frac{1}{8}$**



**XLM-3-31PCS/PCV/PCH- $\frac{1}{8}$**



**XLM-3-32PCS/PCV/PCH- $\frac{1}{8}$**

