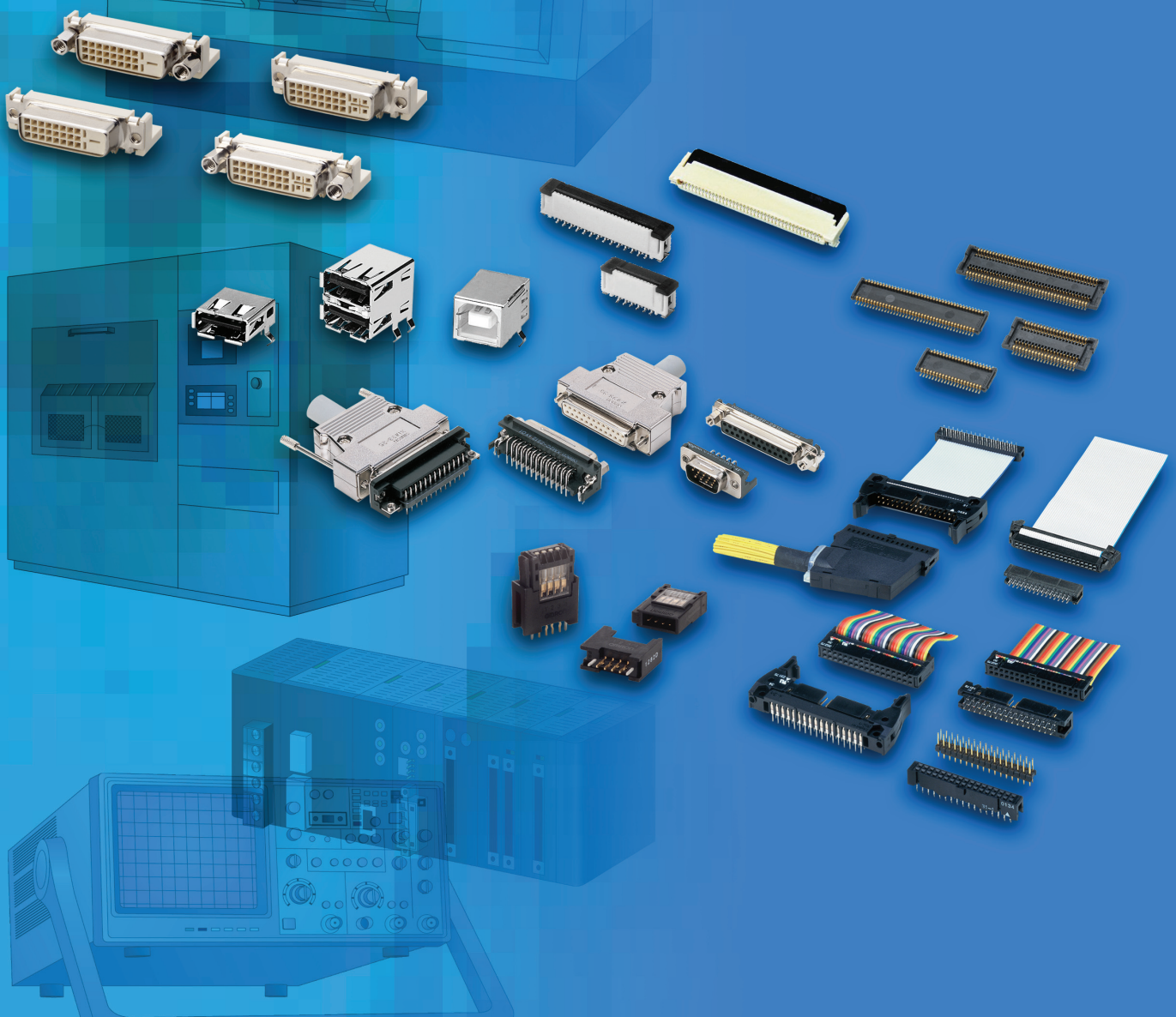


OMRON

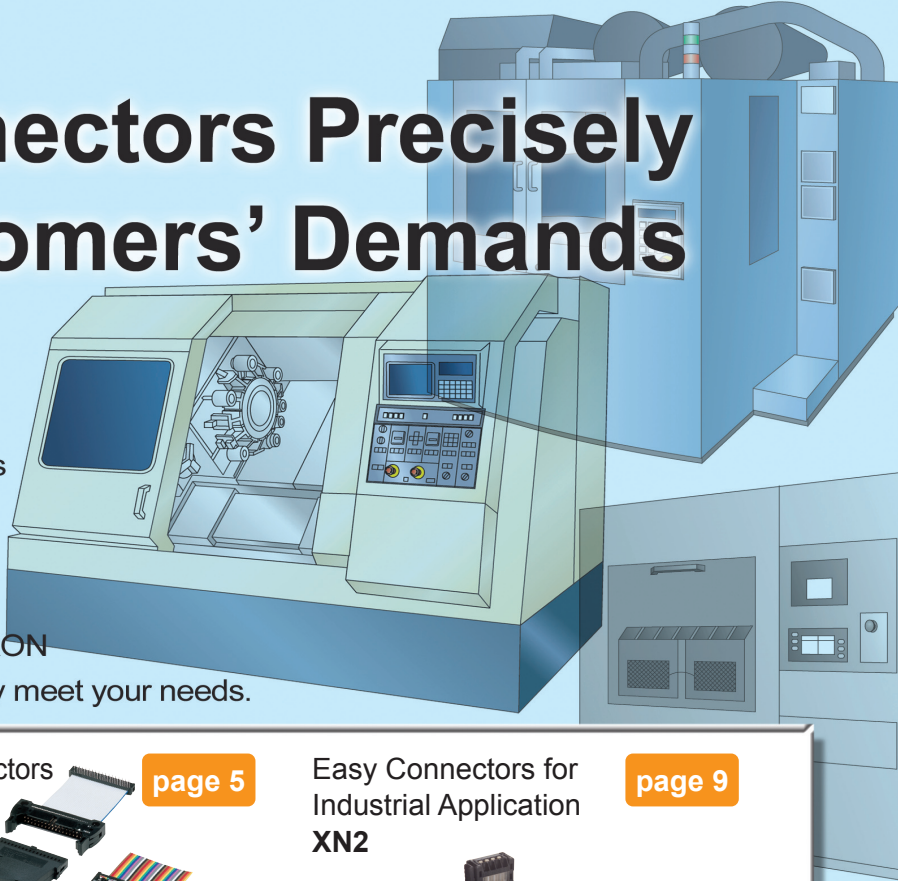
# OMRON Connector Selection



# OMRON Connectors Precisely Meeting Customers' Demands

OMRON's highly reliable PCB connectors support the high-density mounting of PCB components.

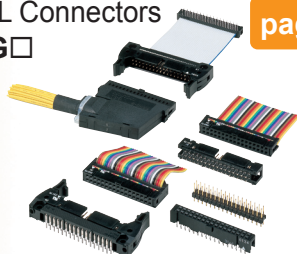
These series include Half-pitch Connectors with a contact pitch of 1.27mm, Flat Cable Connectors conforming to MIL standards, D-sub/DVI/USB Connectors, and PCB Terminal Block as well. Contact your OMRON representative for connectors that precisely meet your needs.



## For PCB-to-Cable Connection

MIL Connectors  
**XG□**

page 5



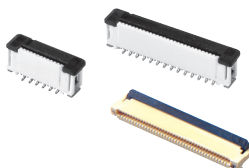
Easy Connectors for Industrial Application  
**XN2**

page 9



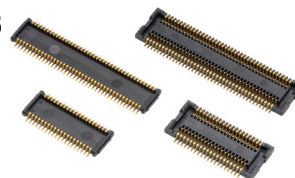
FPC Connectors  
**XF□**

page 11



Board to FPC Connector  
**XB4A / XB4B**

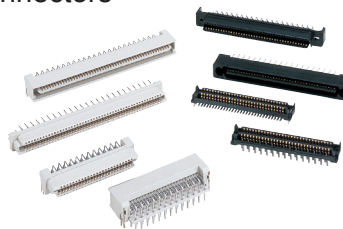
page 13



## For PCB-to-PCB Connection

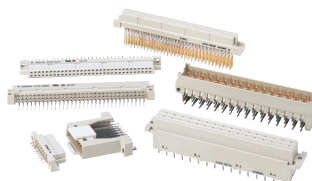
Half-pitch Connectors  
**XH□**

page 15

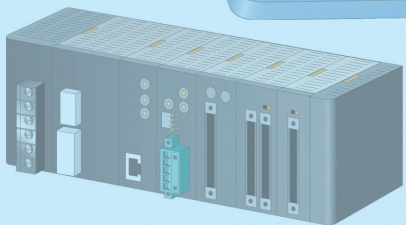
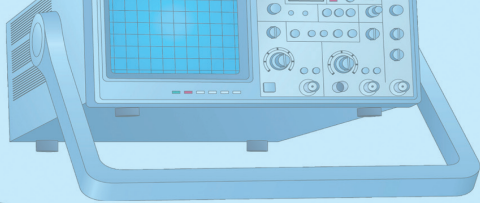


DIN Connectors  
**XC□**

page 19







## For Interface Connection

DVI Connectors  
**XM4M**

page 25



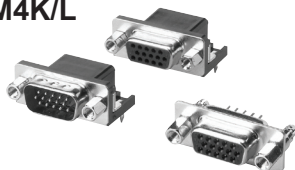
USB Connectors  
**XM7**

page 26



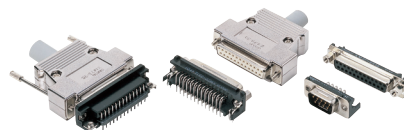
High-density D-sub  
Connectors  
**XM4K/L**

page 27



D-sub Connectors  
**XM2/XM3**

page 29



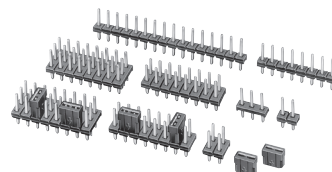
Jump Sockets  
(natural color)  
**XJ8A**

page 6



Jump Connectors  
**XJ8**

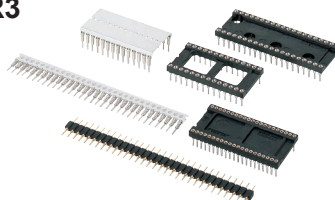
page 6



## Others

IC Sockets  
**XR2/XR3**

page 31



# OMRON's highly operable connectors are

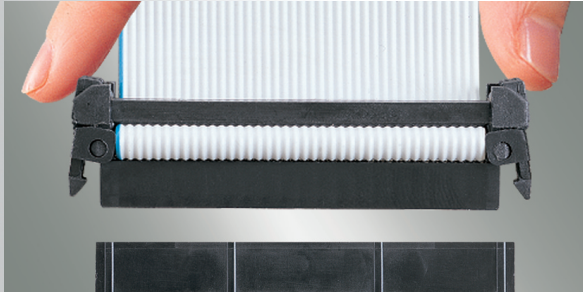
● **"Easy-to-use"** OMRON connectors

● **Excellent operatability and workability**

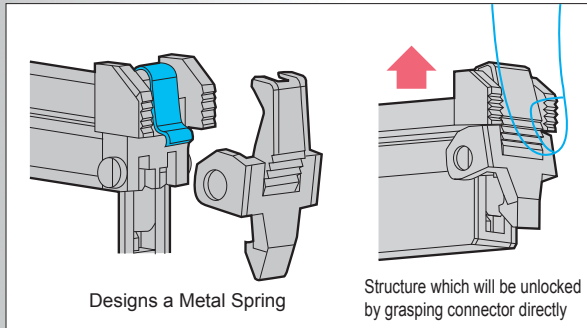
## Improves Workability in "PCB-to-Wire" Connection.

### XG4M-U MIL Connectors with lock

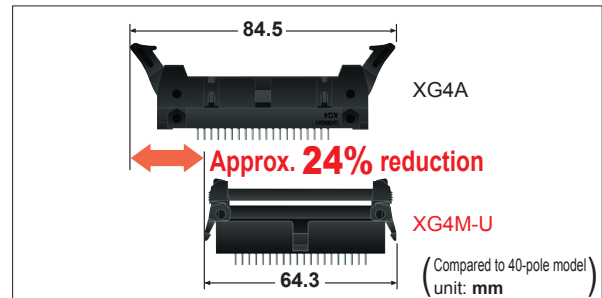
■ Easy to Connect and Disconnect with One Hand



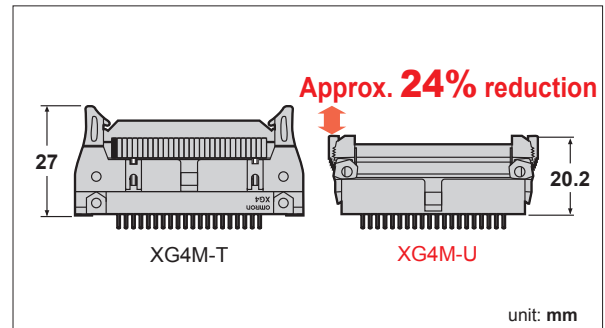
■ Improves Lock Lever Operatability.



■ Up to 24% Less Mounting Area



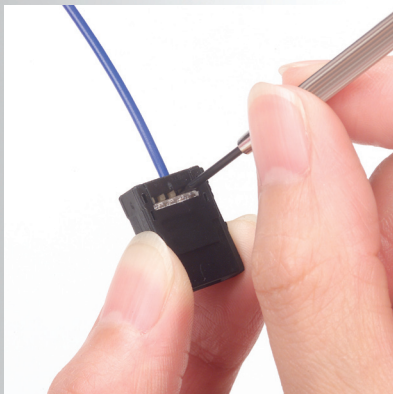
■ Approx. 24% reduction of Mounting Height.



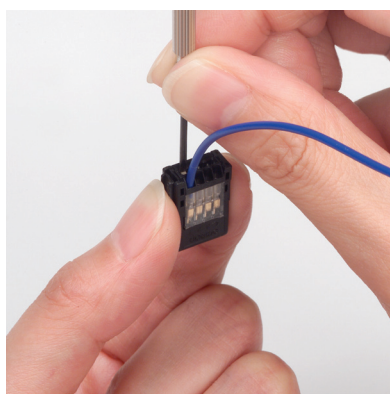
## Easy Connectors Most Suitable for Sensor Connection.

### XN2 Easy Connector for Industrial Application

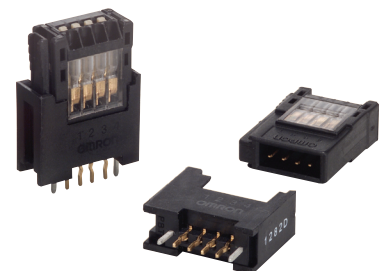
■ Easy Wire Connection  
Requires No Special Tools.



■ Repeat Wire Connection  
(Repair) Possible



■ A Piece Connector Accepts  
a Variety of Wire Size.





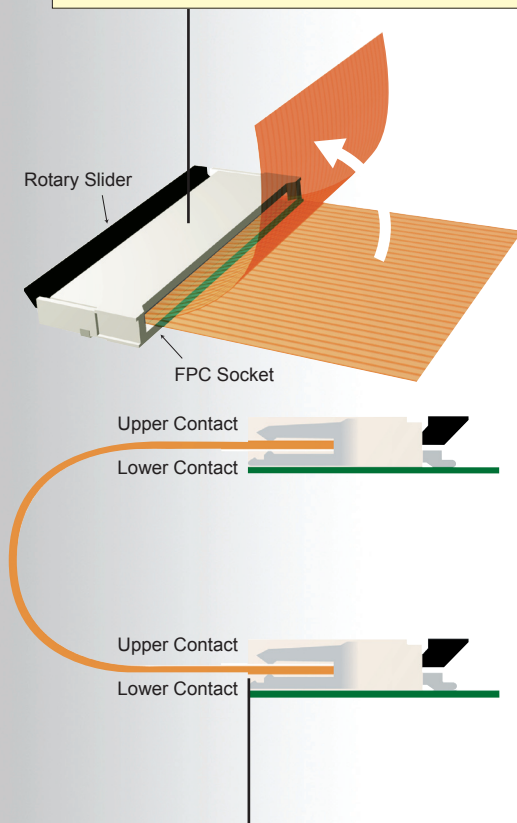
# designed considering on-site work thoroughly

## XF Series FPC Connectors

### Improvement 1

Rotary slider independent of the FPC socket

- ➔ Slider does not disconnect if the FPC is lifted.
- High reliability-A mounted FPC will not come off if excess force is applied to it.



### Improvement 3

Dual contact

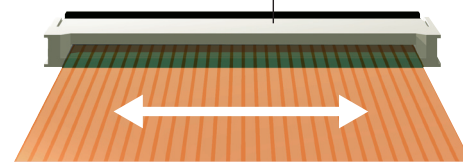
Note: Except the XF3A, XF2C Series and XF2B-61 pin.

- ➔ No need to discriminate between the upper and lower FPC contacts.
- Connectors are the same, so it's not necessary to distinguish between the upper and lower contacts when connecting upper and lower PCBs.

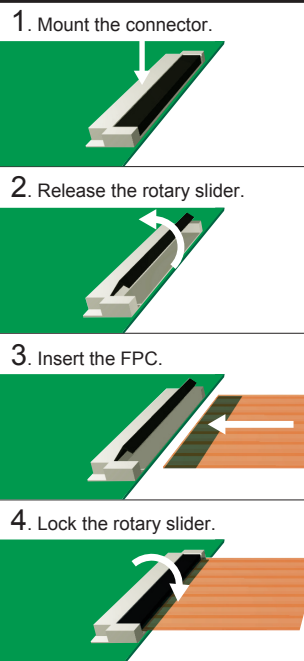
### Improvement 2

Four-sided FPC housing

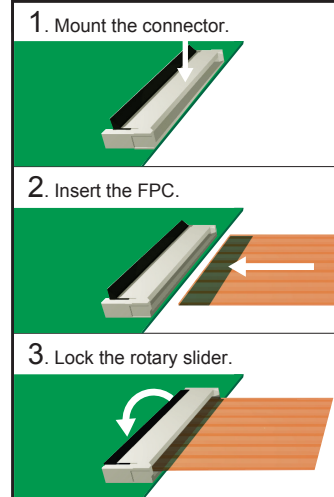
- ➔ Construction prevents FPC displacement.
- Mounting reliability is enhanced because the FPC is held in a four-sided housing and is unaffected by the slider operation.



#### Traditional Rotary Connector



#### XF Series



### Improvement 4

Delivered with the rotary slider open.

- ➔ Reduces the labor required to mount FPCs.
- Assembly speed is improved over the conventional rotary locking type because the rotary slider does not need to be released.

## Natural Color Connector helps you to Improve Circuit Recognition.

### XJ8A Jump Sockets (natural color)

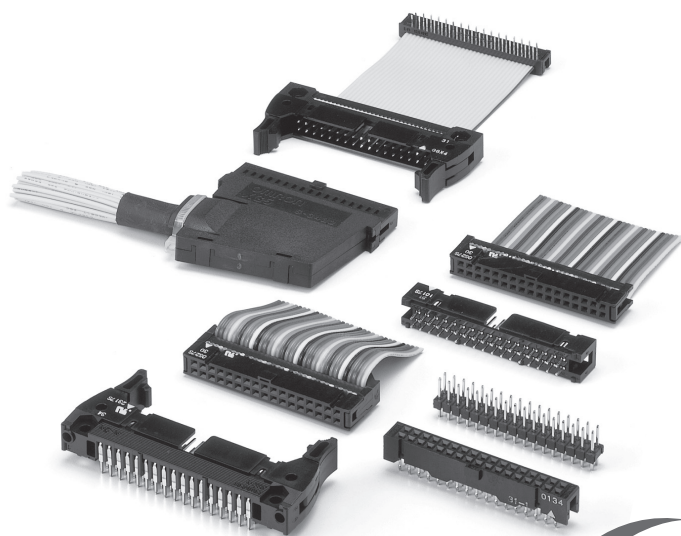
- Easy to Recognize in Inspection Process, or by Circuits.
- Remains the structure of “Easy-to-connect” and “Hard-to-disconnect”.



# XG□ and XJ8

## Flat Cable Connectors and Jump Connectors

### Flat Cable Connectors Responding to a Variety of Needs for Connecting Wires to PCBs



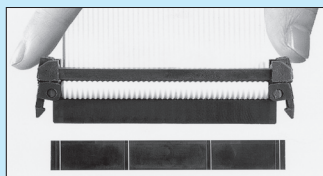
#### Connection Examples

● "Easy-to-use" OMRON connectors

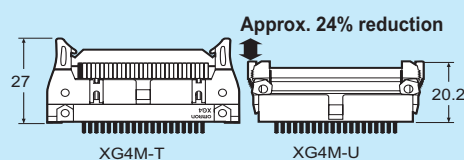
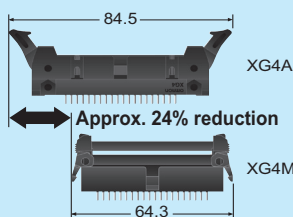
XG4T-□□□5  
Socket pull-out tab

#### ● XG4M-U Socket Connectors with lock

Connection and Disconnection with One Hand



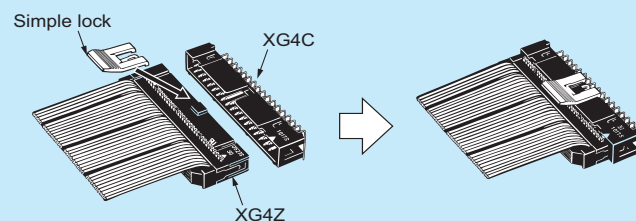
Space Saving



(compared to 40-mm models; unit: mm)

#### ● XG4Z/XG5Z Simple Lock (for Box Plug)

The Simple Lock for the Box Plug makes it possible to lock the Connector securely.

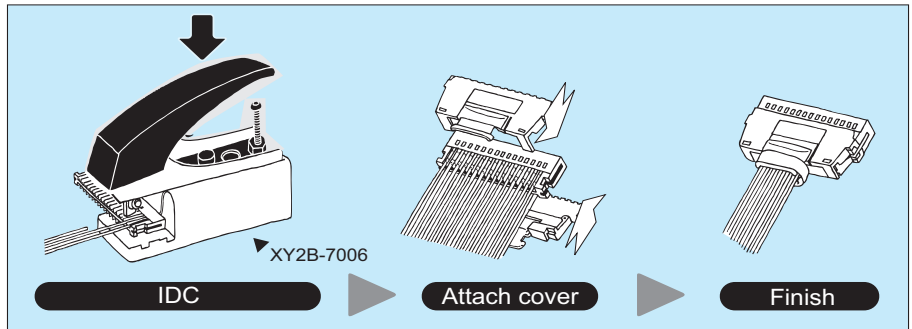




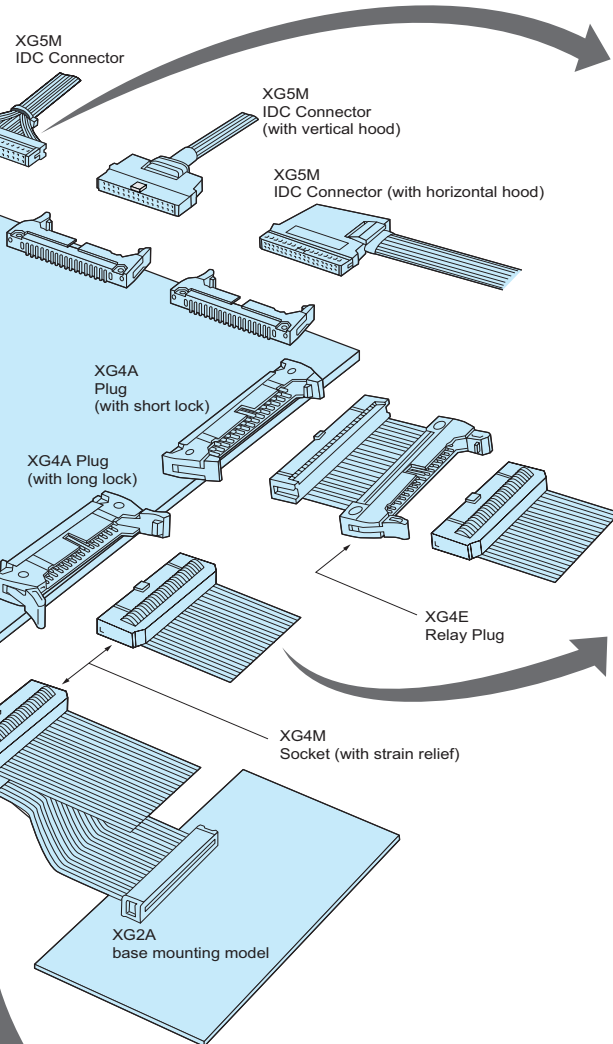
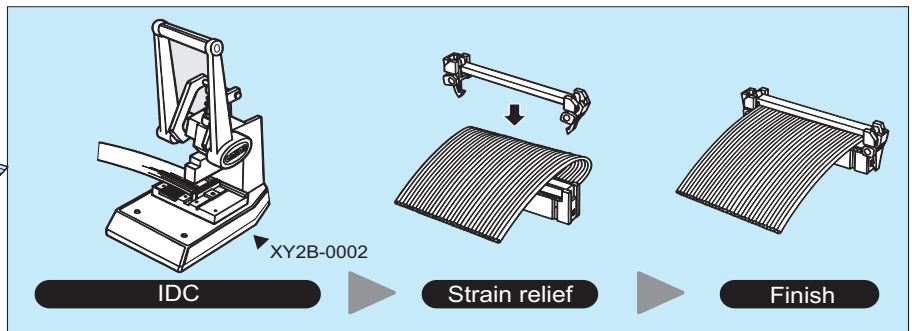
# IDC:Insulation Displacement Connection

## ●XG5M IDC Connectors

Wiring performed with special tool, eliminating the need for wire-end stripping or crimping.



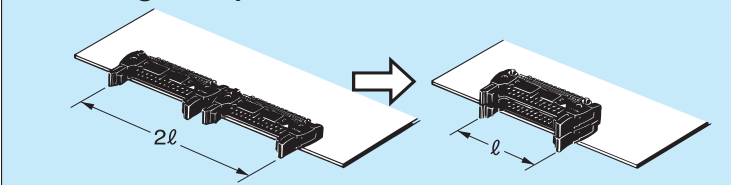
## ●XG4M IDC Connectors



## ●XG4A-A 2-tier Plugs

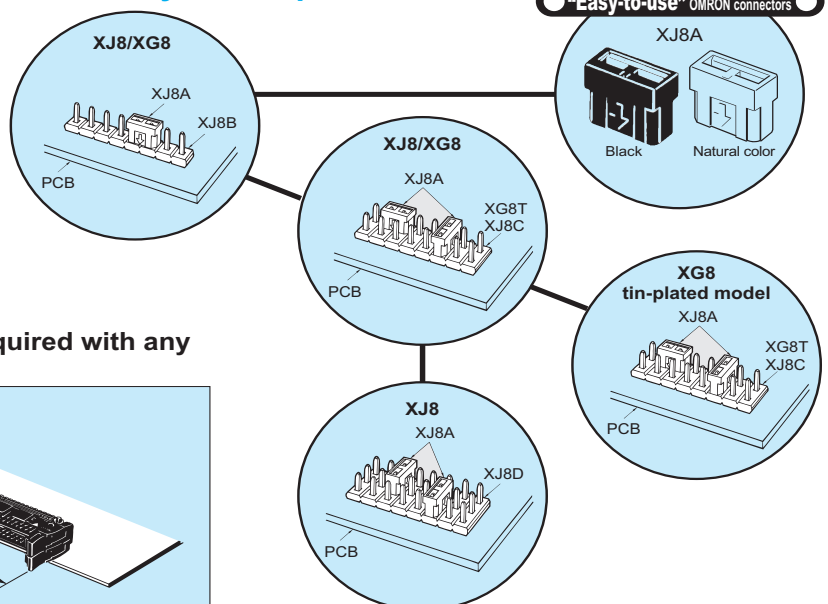
2-tier plugs occupying half the space required with any conventional model.

### ●Mounting Example



## ■A Variety of Jump Connectors

“Easy-to-use” OMRON connectors



# XG□ and XJ8

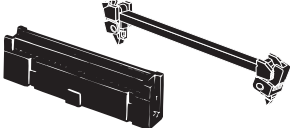
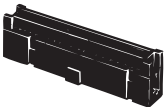
## Flat Cable Connectors and Jump Connectors

### Ordering Information

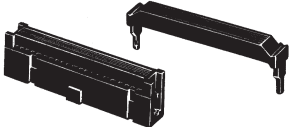
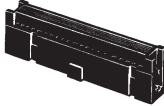
#### ●XG4M Socket connectors with lock

XG4M-□□30-U

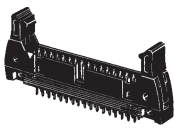
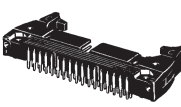
XG4M-□□31-U

|                        |                                                                                                                                    |                                                                                                                                                   |                                                                                                                               |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Set Model<br>XG4M-□□30-U *1<br>XG4M-□□31-U *2<br> | Socket (with open-end cover)<br>XG4M-□□30 *1<br>XG4M-□□31 *2<br> | Strain relief (with lock)<br>XG4U-□□04<br> |
| Number of contacts     |                                                                                                                                    |                                                                                                                                                   |                                                                                                                               |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                         | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                        | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                    |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                         | 50, 60, 64                                                                                                                                        |                                                                                                                               |
| *2: 0 Polarizing guide | 10                                                                                                                                 | 10                                                                                                                                                |                                                                                                                               |

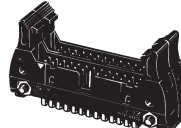
#### ●XG4M Socket connectors

|                        |                                                                                                                                     |                                                                                                                                                    |                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Set Model<br>XG4M-□□30-T *1<br>XG4M-□□31-T *2<br> | Socket (with open-end cover)<br>XG4M-□□30 *1<br>XG4M-□□31 *2<br> | Strain relief (for XG4M)<br>XG4T-□□04<br> |
| Number of contacts     |                                                                                                                                     |                                                                                                                                                    |                                                                                                                               |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                          | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                         | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                    |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                          | 50, 60, 64                                                                                                                                         |                                                                                                                               |
| *2: 0 Polarizing guide | 10                                                                                                                                  | 10                                                                                                                                                 |                                                                                                                               |

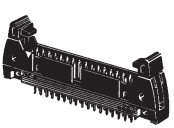
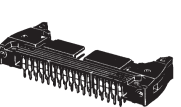
#### ●XG4A Plug connectors with long lock

|                        |                                                                                                                                          |                                                                                                                                             |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Straight terminal<br>XG4A-□□31 *1<br>XG4A-□□71 *2<br> | Right angle terminal<br>XG4A-□□34 *1<br>XG4A-□□74 *2<br> |
| Number of contacts     |                                                                                                                                          |                                                                                                                                             |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                               | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                  |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                               | 50, 60, 64                                                                                                                                  |
| *2: 0 Polarizing guide | 10                                                                                                                                       | 10                                                                                                                                          |

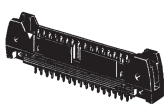
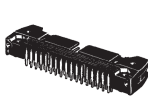
#### ●XG4A 2-tier Plugs with long lock

|                        |                                                                                                                                                   |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Right angle terminal<br>XG4A-□□39-A *1<br>XG4A-□□79-A *2<br> |
| Number of contacts     |                                                                                                                                                   |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                        |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                                        |
| *2: 0 Polarizing guide | 10                                                                                                                                                |

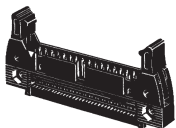
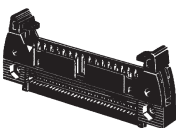
#### ●XG4A Plug Connectors with short lock

|                        |                                                                                                                                          |                                                                                                                                             |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Straight terminal<br>XG4A-□□32 *1<br>XG4A-□□72 *2<br> | Right angle terminal<br>XG4A-□□35 *1<br>XG4A-□□75 *2<br> |
| Number of contacts     |                                                                                                                                          |                                                                                                                                             |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                               | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                  |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                               | 50, 60, 64                                                                                                                                  |
| *2: 0 Polarizing guide | 10                                                                                                                                       | 10                                                                                                                                          |

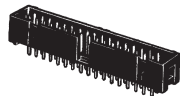
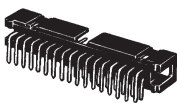
#### ●XG4A Plugs without lock lever

|                        |                                                                                                                                            |                                                                                                                                               |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Shape                  | Straight terminal<br>XG4A-□□33 *1<br>XG4A-□□73 *2<br> | Right angle terminal<br>XG4A-□□36 *1<br>XG4A-□□76 *2<br> |
| Number of contacts     |                                                                                                                                            |                                                                                                                                               |
| *1: 1 Polarizing guide | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                 | 10, 14, 16, 20, 26, 30, 34, 40, 50, 60, 64                                                                                                    |
| *2: 2 Polarizing guide | 50, 60, 64                                                                                                                                 | 50, 60, 64                                                                                                                                    |
| *2: 0 Polarizing guide | 10                                                                                                                                         | 10                                                                                                                                            |

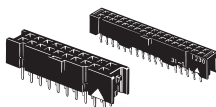
## ●XG4E Relay plug connectors

|       |                                                                                   |                                                                                   |                                                                                     |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Shape | Long lock<br>XG4E-□□31 *1<br>XG4E-□□71 *2                                         | Short lock<br>XG4E-□□32 *1<br>XG4E-□□72 *2                                        | Strain relief (for XG4E)<br>XG4S-□□04                                               |
|       |  |  |  |
|       | Number of contacts                                                                |                                                                                   |                                                                                     |
|       | *1: Polarizing guide 1<br>*2: Polarizing guide 2<br>*2: Polarizing guide 0        | 10,14,16,20,26,30,34,40,50,60,64<br>50,60,64<br>10                                | 10,14,16,20,26,30,34,40,50,60,64<br>50,60,64<br>10                                  |

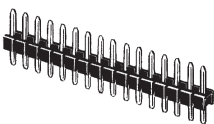
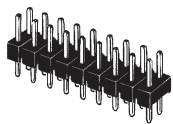
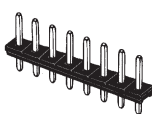
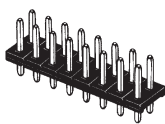
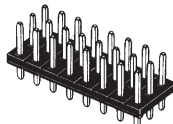
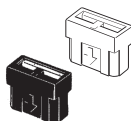
## ●XG4C Box type plug connectors

|       |                                                                                   |                                                                                   |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Shape | Straight terminal<br>XG4C-□□31 *1<br>XG4C-□□71 *2                                 | Right angle terminal<br>XG4C-□□34 *1<br>XG4C-□□74 *2                              |
|       |  |  |
|       | Number of contacts                                                                |                                                                                   |
|       | *1: 1 Polarizing guide<br>*2: 2 Polarizing guide<br>*2: 0 Polarizing guide        | 10,14,16,20,26,30,34,40,50,60,64<br>50,60,64<br>10                                |

## ●XG4H Socket for board to board connectors

|       |                                                                                     |                                                                                     |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Shape | Straight terminal<br>XG4H-□□31 *1<br>XG4H-□□71 *2                                   | Right angle terminal<br>XG4H-4034                                                   |
|       |  |  |
|       | Number of contacts                                                                  |                                                                                     |
|       | *1: 1 Polarizing guide<br>*2: 2 Polarizing guide                                    | 10,14,16,20,26,30,34,40,50,60,64<br>40<br>50,60,64<br>—                             |

## ●XG8/XJ8 Jump connectors

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Shape              | XG8S-□□31<br>XG8S-□□41                                                              | XG8T-□□31<br>XG8T-□□41                                                              | XJ8B-□□11                                                                           | XJ8C-□□11                                                                            | XJ8D-□□11                                                                             | XJ8A-0211<br>XJ8A-0241<br>XJ8A-0214                                                   |
|                    |  |  |  |  |  |  |
| Number of contacts | 2,3,4,6,8,16,18                                                                     | 2,4,6,8,10,12,14,16,18,20                                                           | 2,3,4,6,8,16                                                                        | 2,3,4,6,8,10,12,14,16                                                                | 3,6,9,12,15,18,21,24                                                                  | 2                                                                                     |

## ●XG8 Original plugs

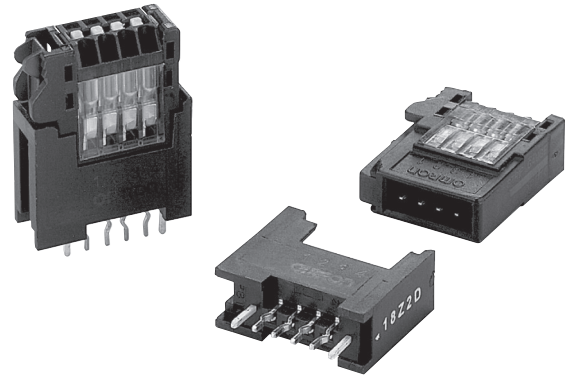
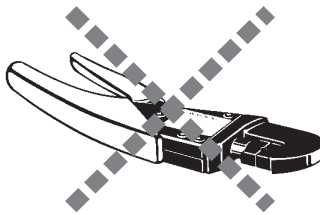
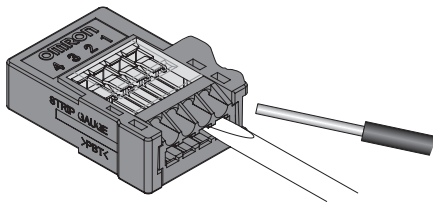
|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Shape              | 1-Row type<br>Straight terminal<br>XG8A-5031                                        | 1-Row type<br>Right angle terminal<br>XG8A-5034                                     | 2-Row type<br>Straight terminal<br>XG8B-0131                                        | 2-Row type<br>Right angle terminal<br>XG8B-0134                                      | Straight terminal<br>XG8W-□□31(Au)<br>XG8W-□□41(Sn)                                   | Right angle terminal<br>XG8W-□□34(Au)<br>XG8W-□□44(Sn)                                |
|                    |  |  |  |  |  |  |
| Number of contacts | 50                                                                                  | 50                                                                                  | 100                                                                                 | 100                                                                                  | 10,14,16,20,26,30,34,40,50,60                                                         | 20,26,30,34,40,50                                                                     |



### Easy-wire Connectors With *e-CON*\* Specifications, Ideal for connecting Sensors

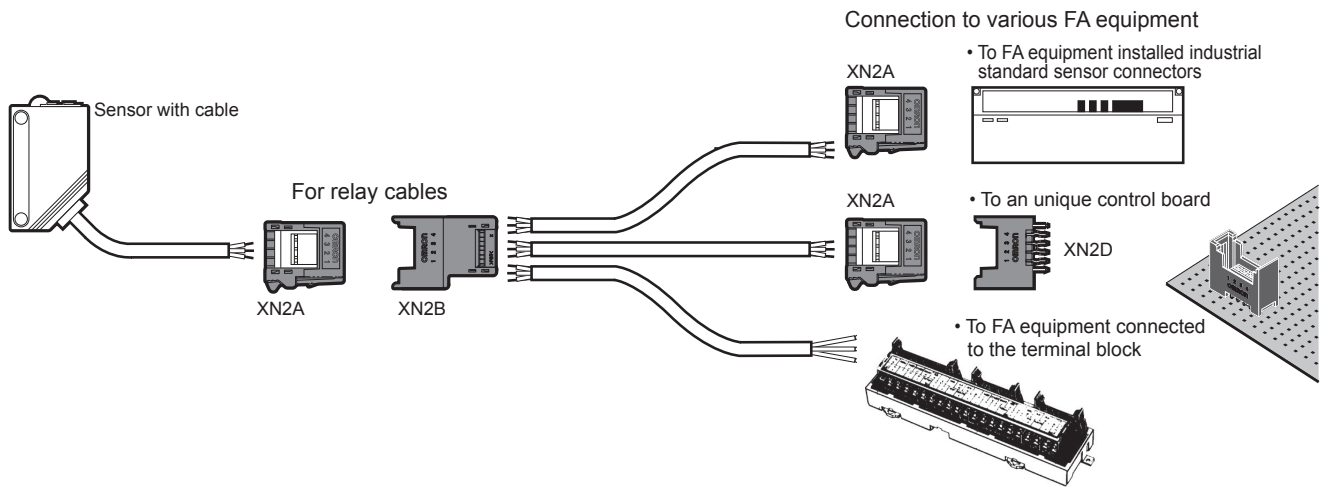
- Use industry— proven spring clamps for wiring.
- Rewiring (reparing) is possible.
- Each connector accepts any wire size from AWG28 (0.08 mm<sup>2</sup>) to AWG20 (0.5mm<sup>2</sup>).  
(External sheath diameter: 1.5mm max).

No special tools required for easy wiring

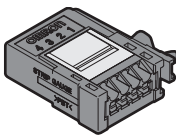
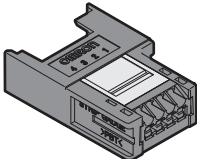
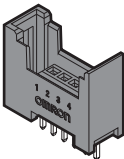
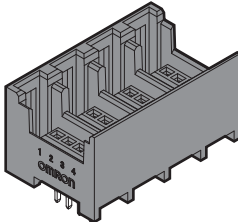


\* *e-CON* Specifications are currently being promoted for Standardization by manufacturers of FA Components and Connections.

## ■Example of Wiring Form



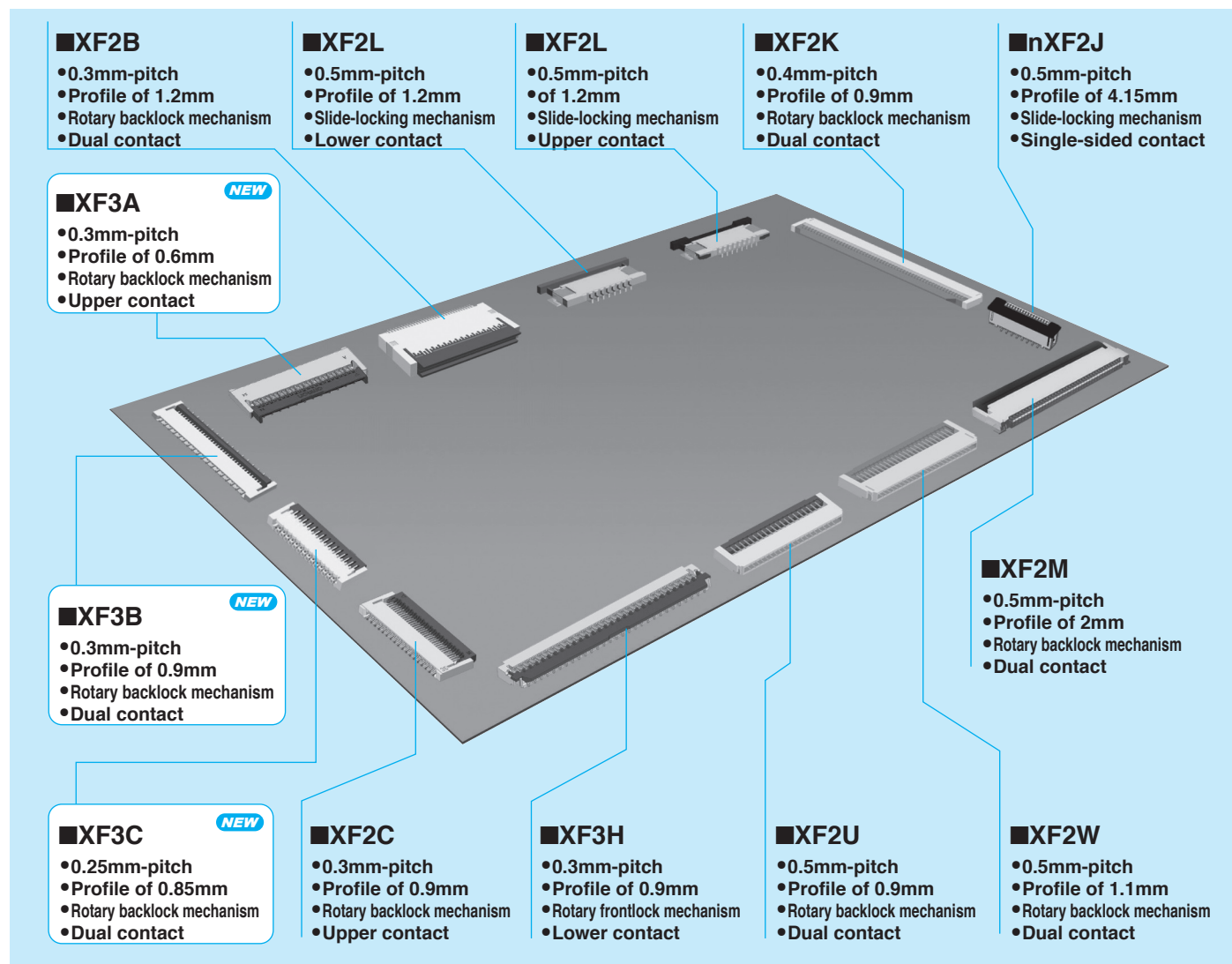
## ■Ordering Information

| Type            | Cable Plug Connector                                                                | Cable Socket Connector                                                              | Single-socket PCB Socket Connector                                                   | Four-socket PCB Socket Connector                                                      |
|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Appearance      |  |  |  |  |
| No. of contacts | Model                                                                               | Model                                                                               | Model                                                                                | Model                                                                                 |
| 3               | XN2A-1370                                                                           | ---                                                                                 | XN2D-1371                                                                            | ---                                                                                   |
| 4               | XN2A-1470                                                                           | XN2B-1470                                                                           | XN2D-1471                                                                            | XN2D-4471                                                                             |
| 5               | XN2A-1570                                                                           | ---                                                                                 | XN2D-1571                                                                            | ---                                                                                   |
| 6               | XN2A-1670                                                                           | ---                                                                                 | XN2D-1671                                                                            | ---                                                                                   |
| 8               | XN2A-1870                                                                           | ---                                                                                 | XN2D-1871                                                                            | ---                                                                                   |

# XF Series

## FPC Connectors

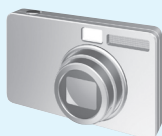
FPC Connectors must offer easy operation and secure mounting in tight working spaces. The rotary backlock construction of the XF Series solves FPC mounting problems and significantly enhances work efficiency and reliability.



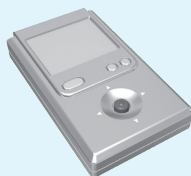
### Applications



I Mobile phones



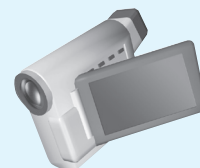
I Digital cameras



I Portable audio devices



I DVD drives



I Digital video cameras



## ■ Product Overview

| Model                                                                                    | Lock mechanism   | Pitch  | On-board height | Depth (*4) | Applicable FPC thickness | Contact type         |
|------------------------------------------------------------------------------------------|------------------|--------|-----------------|------------|--------------------------|----------------------|
|  XF3C   | Rotary backlock  | 0.25mm | 0.85mm          | 3.8mm      | 0.12mm                   | Dual contact         |
|  XF3A   | Rotary backlock  | 0.3mm  | 0.6mm           | 3.8mm      | 0.12mm                   | Upper contact        |
|  XF3B   | Rotary backlock  | 0.3mm  | 0.9mm           | 4.0mm*3    | 0.2mm                    | Dual contact         |
|  XF2C   | Rotary backlock  | 0.3mm  | 0.9mm           | 4.0mm      | 0.12mm                   | Upper contact        |
|  XF2B  | Rotary backlock  | 0.3mm  | 1.2mm           | 5.5mm      | 0.2mm                    | Dual contact*1       |
|  XF3H | Rotary frontlock | 0.3mm  | 0.9mm           | 3.5mm      | 0.2mm                    | Lower contact        |
|  XF2K | Rotary backlock  | 0.4mm  | 0.9mm           | 4.0mm      | 0.2mm                    | Dual contact         |
|  XF2U | Rotary backlock  | 0.5mm  | 0.9mm           | 3.5mm      | 0.2mm                    | Dual contact         |
|  XF2W | Rotary backlock  | 0.5mm  | 1.1mm           | 3.5mm*3    | 0.3mm                    | Dual contact         |
|  XF2M | Rotary backlock  | 0.5mm  | 2.0mm*2         | 5.9mm*2    | 0.3mm                    | Dual contact         |
|  XF2L | Slide lock       | 0.5mm  | 1.2mm           | 3.45mm     | 0.3mm                    | Upper/lower contact  |
|  XF2J | Slide lock       | 0.5mm  | 4.15mm          | 3.4mm      | 0.3mm                    | Single-sided contact |

\*1: Models with 61 pins have upper contacts. \*2: 55 and 60 pins are different specifications.

\*3: Dimensions differ for the long-lock type.      \*4: These are latch closed dimension.

## ■ Model Number Legend

**XF**           -                     -                -          

(1) (2) (3) (4) (5) (6) (7) (8)

- (1) Classification in Series  
2B, 2C, 2J, 2K, 2L,  
2M, 2U, 2W, 3A, 3B, 3C,  
3H

- (2) Number of Signal Contact Pins
- (3) Signal Contact Arrangement
- 1: One-row, double-sided contact
  - 2: One-row, single-sided contact (including upper contact and top entry)
  - 3: One-row, single-sided contact (lower contact)

- 4: Two-row, double-sided contact  
5: Two-row, single-sided contact

- (4) Terminal Shape  
4: SMT terminals  
(top entry)  
5: SMT terminals  
(side entry)

- (5) Applicable FPC thickness  
1: 0.3mm  
3: 0.2mm

- 4: 0.12mm  
5: 0.15mm

- (6) Terminal Arrangement  
□: Standard  
1: Staggered arrangement  
(forward arrangement)  
2: Staggered arrangement  
(backward arrangement)

- (7) Plating  
A: Au

- (8) Special  
Correspondence  
E: Easy lock type  
H: For multiple pins

- (7) Plating  
A: Au

- (8) Special Correspondence  
E: Easy lock type  
H: For multiple pins

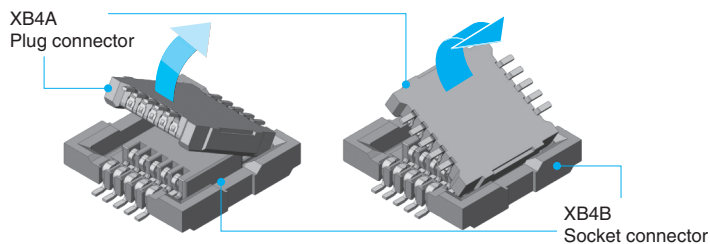
# XB4A/B

## 0.4mm Pitch Board to FPC Connectors

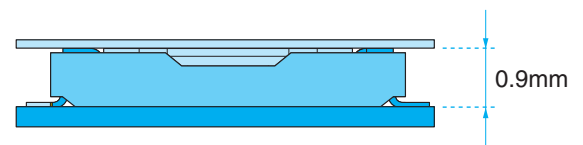
Ultra-low profile connector with a stacking height of 0.9mm, guarantees easy operation and high contact reliability.

- The low-profile shape, a sharp “click” and a high retention force
- Possible to remove any direction
- Easy insertion performance by self-alignment
- Double contacts ensure highly reliable contact

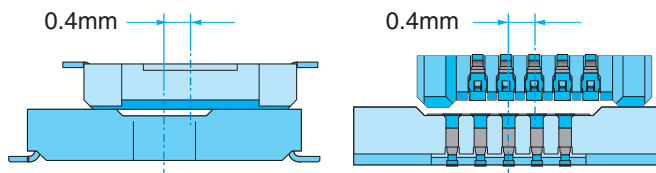
### ● Twist-resistant design allows removal in all directions



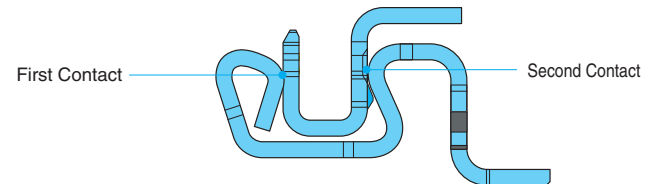
### ● Low-profile type with a stacking height of just 0.9 mm



### ● Featuring the self-alignment structure



### ● Double contacts ensure highly reliable contact



## Product Overview

| Model                                                                                     | Part name | Pitch | Stacking height | Width |
|-------------------------------------------------------------------------------------------|-----------|-------|-----------------|-------|
| <br>XB4A | Plug      | 0.4mm | 0.9mm           | 4.1mm |
| <br>XB4B | Socket    |       |                 | 5.0mm |

**Model Number Legend** \* Use this legend when determining the product specifications from the model number.  
Choose from the model numbers listed in this catalog when ordering.

**XB4**   -     **35-D**

(1) (2) (3) (4)(5) (6)

(1) Series Name  
0.4-mm Pitch Board to  
FPC Connector

(2) Classification in Series

A: Plug  
B: Socket

(3) Number of Signal Contact Pins

(4) Plating

3: Au

(5) Terminal Shape  
SMT terminals

(6) Accessories

D: Without boss and  
hold down

## Ordering Information

| Type   | Pin No. | Quantity per reel (See Note 1) | Model              |
|--------|---------|--------------------------------|--------------------|
| Plug   | 24      | 3,000                          | <b>XB4A-2435-D</b> |
|        | 40      | 3,000                          | <b>XB4A-4035-D</b> |
|        | 80      | 3,000                          | <b>XB4A-8035-D</b> |
| Socket | 24      | 3,000                          | <b>XB4B-2435-D</b> |
|        | 40      | 3,000                          | <b>XB4B-4035-D</b> |
|        | 80      | 3,000                          | <b>XB4B-8035-D</b> |

**Note: 1.** Please order a multiple of the quantity per reel.

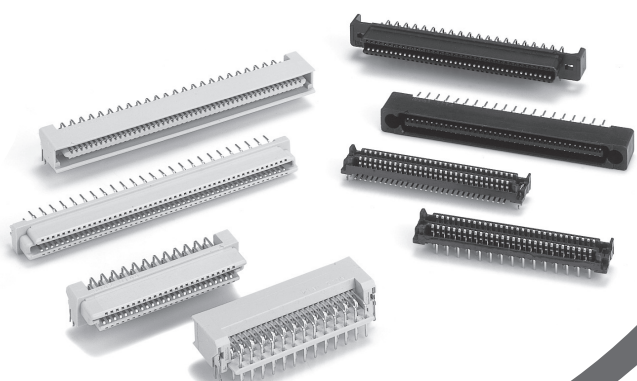
# XH3/XH4/XH2

## Half-pitch Connectors Series

### 1.27-mm Contact Pitch

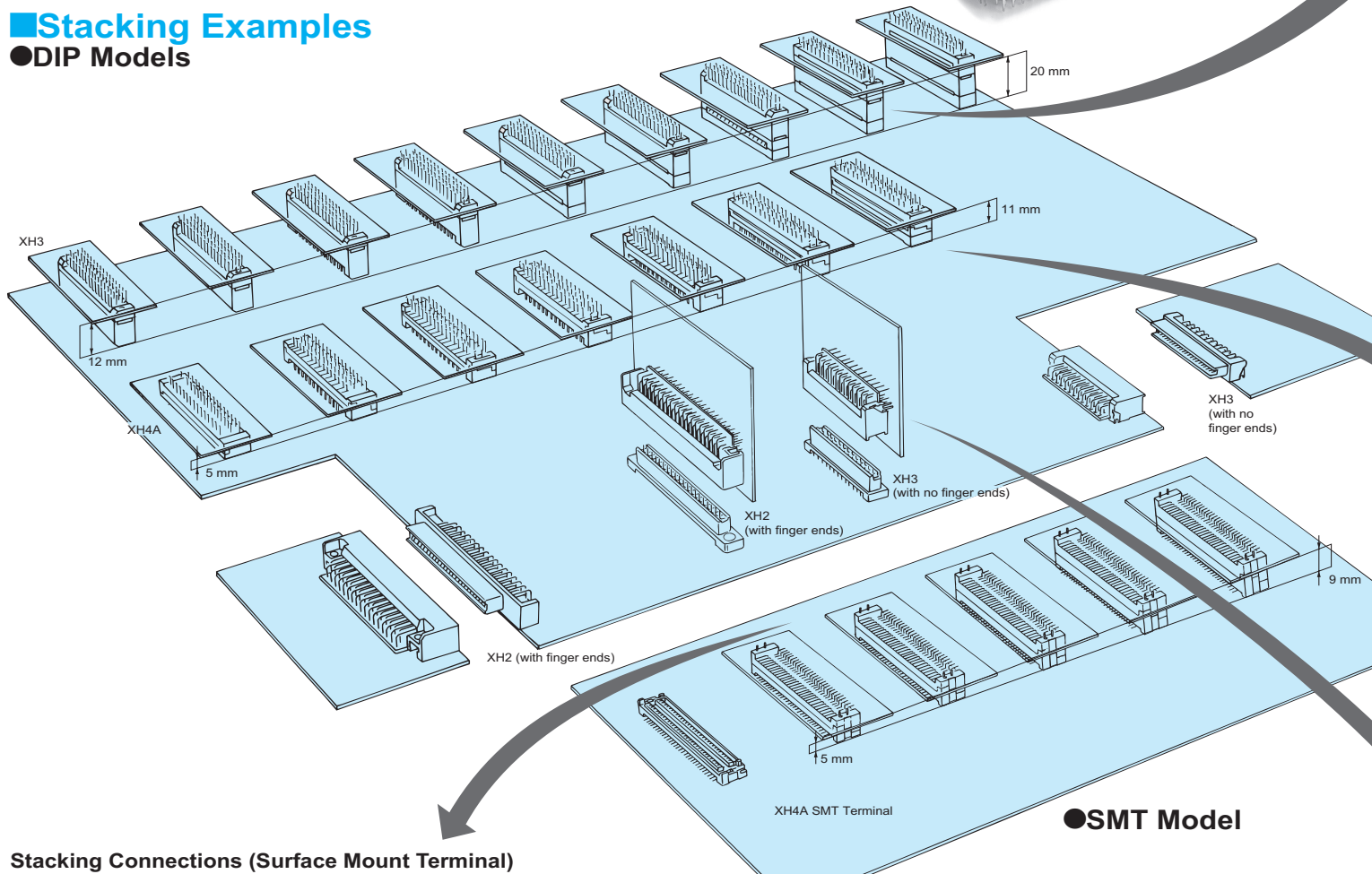
### Greatly Contributing to High-density Mounting of Electronic Components and Miniaturization of Electronic Devices

- Stacking heights supported in the range 5 to 20 mm at 1-mm increments.
- Leaf contact structure ensures high resistance to twisting force and smooth connection and disconnection.
- XH2/XH3: Au/Pd-plated contacts with an engagement length of 3.1 mm ensure high contact reliability.
- Snap-on terminal for easy connection to the PCB.
- Housing with standoff construction for improved soldering quality and easier cleaning (except 1 and 2-mm increment models).
- XH2/XH3/XH4 DIP model: Approved by EN, IEC, UL, and CSA standards.
- Product lineup includes fine-fit models that are mounted to PCBs with ease with no soldering.



### Stacking Examples

#### ●DIP Models



#### ●SMT Model

#### Stacking Connections (Surface Mount Terminal)

| Stacking Height | 5 mm | 6 mm | 7 mm | 8 mm | 9 mm |
|-----------------|------|------|------|------|------|
| Engagement      |      |      |      |      |      |



## Engagement

### Stacking Connections

| Stacking Height | 12 mm | 13 mm | 14 mm | 15 mm | 16 mm |
|-----------------|-------|-------|-------|-------|-------|
| Engagement      |       |       |       |       |       |
| Stacking Height | 17 mm | 18 mm | 19 mm | 20 mm |       |
| Engagement      |       |       |       |       |       |

### Stacking Connections (Straight Terminal)

| Stacking Height | 5 mm | 6 mm  | 7 mm  | 8 mm |
|-----------------|------|-------|-------|------|
| Engagement      |      |       |       |      |
| Stacking Height | 9 mm | 10 mm | 11 mm |      |
| Engagement      |      |       |       |      |

### Vertical/Horizontal/Stacking

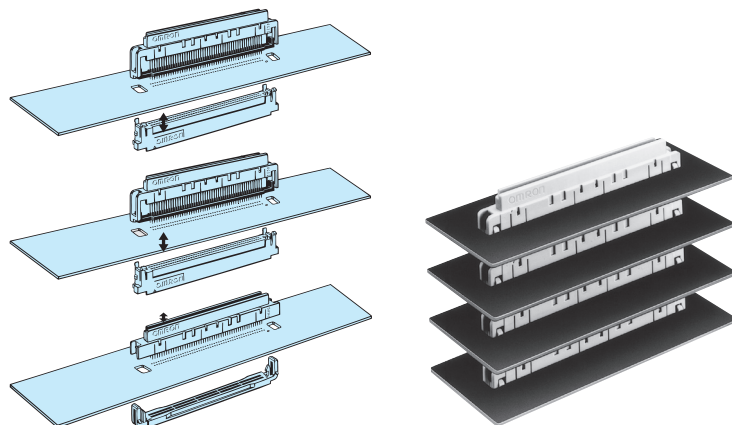
| Vertical (Standard) (See note.) | Vertical (Reverse) | Horizontal |
|---------------------------------|--------------------|------------|
|                                 |                    |            |

# XH3/XH4/XH2

## Half-pitch Connectors Series

### ■ Connection Examples

#### ● Multi-tier Stacking of Fine-fit Models



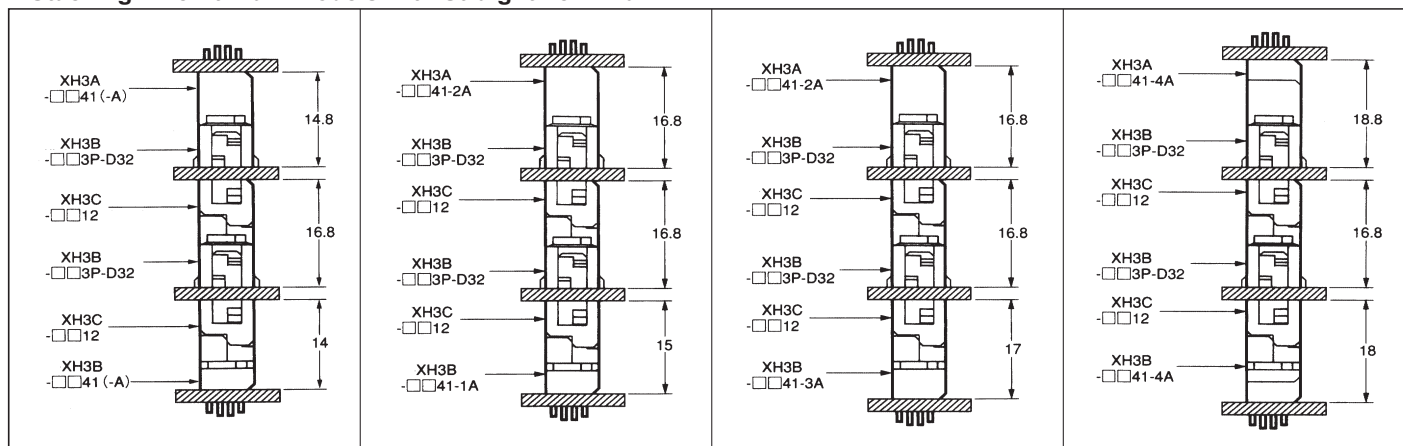
#### ● Fine Fit

The term "fine fit" (generally known as "press fit") refers to the technique where the connector terminal are pressed into the through holes of the PCB to connect the PCB and connector electrically and mechanically with the spring pressure of the terminal.

The connector is connected with no solder, eliminating the soldering stage usually required with connectors. Furthermore the PCB is free of thermal load or flux, thus contributing to cost reductions and improvements in contact reliability.

### ■ Engagement

#### ● Stacking Fine-fit Plain Models with Straight Terminal

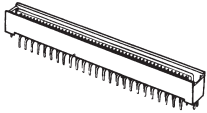
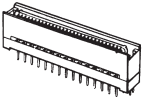
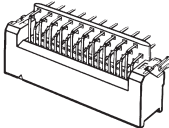


### ■ Ordering Information

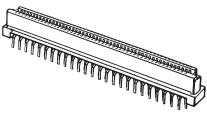
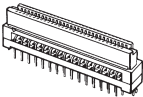
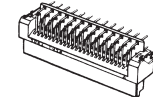
#### ● XH3 Half-pitch Connectors (Fine-fit and Stacking Connection)

|                    |                                                           |                                        |                              |
|--------------------|-----------------------------------------------------------|----------------------------------------|------------------------------|
| Shape              | Socket (Backplane Model)<br>XH3B-013P-D32                 | Housing (Backplane Model)<br>XH3C-0112 | Set model<br>XH3B-013P-D32-C |
|                    |                                                           |                                        |                              |
| Number of contacts | 100                                                       | 100                                    | 100                          |
| Shape              | Connector with socket and short terminal<br>XH3B-013P-D5F | Cover for short terminal<br>XH3S-0111  | Set model<br>XH3B-013P-D5F-S |
|                    |                                                           |                                        |                              |
| Number of contacts | 100                                                       | 100                                    | 100                          |

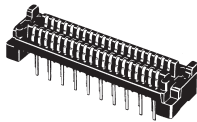
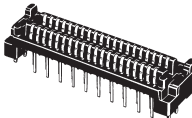
### ●XH3 Half-pitch Connectors (Board-to-Board Connection) Plugs

|                    |                                                                                                                                              |                                                                                                                                                                                                                      |                                                                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Plug with Straight terminal<br>XH3A-□□41<br>XH3A-□□41-A<br> | Plug with Straight terminal<br>(models with stacking height adjustable in 2 or 4-mm increments)<br>XH3A-□□41-2A<br>XH3A-□□41-4A<br> | Plug with Right angle terminal<br>XH3A-□□42-A<br> |
| Number of contacts | 20,30,40,50,60,68,80,100,120                                                                                                                 | 20,30,40,50,60,68,80,100,120                                                                                                                                                                                         | 30,40,50,60,68,80,100                                                                                                               |

### Sockets

|                    |                                                                                                                                                |                                                                                                                                                                                                                                            |                                                                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Socket with Straight terminal<br>XH3B-□□41<br>XH3B-□□41-A<br> | Socket with Straight terminal<br>(models with stacking height adjustable in 1, 3, or 4-mm increments)<br>XH3B-□□41-1A<br>XH3B-□□41-3A<br>XH3B-□□41-4A<br> | Socket with Right angle terminal<br>(Provided with Lock Terminal)<br>XH3B-□□42-A<br> |
| Number of contacts | 20,30,40,50,60,68,80,100,120                                                                                                                   | 20,30,40,50,60,68,80,100,120                                                                                                                                                                                                               | 30,40,50,60,68,80,100                                                                                                                                                  |

### ●XH4 Half-pitch Connectors (Low-profile Stacking Connection)

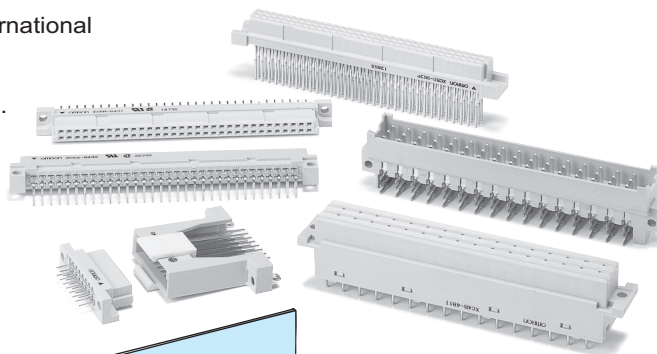
|                    |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Half-pitch Connector with Straight terminal<br>XH4A-□□31<br> | Half-pitch Connector with Straight terminal<br>(models other than standard models with stacking height adjustable in 1, 2, or 3-mm increments)<br>XH4A-□□31-A<br>XH4A-□□31-1A<br>XH4A-□□31-2A<br>XH4A-□□31-3A<br> | Half-pitch Connector with SMT<br>(models other than standard models with stacking height adjustable in 1 or 2-mm increments)<br>XH4A-□□35-A<br>XH4A-□□35-1A<br>XH4A-□□35-2A<br> |
| Number of contacts | 40,50,60,80,100                                                                                                                                 | 40,50,60,80,100                                                                                                                                                                                                                                                                                      | 40,50,60,80,100                                                                                                                                                                                                                                                     |

# XC5/XC6/XC7/XC2/XC4

## DIN Connectors Series

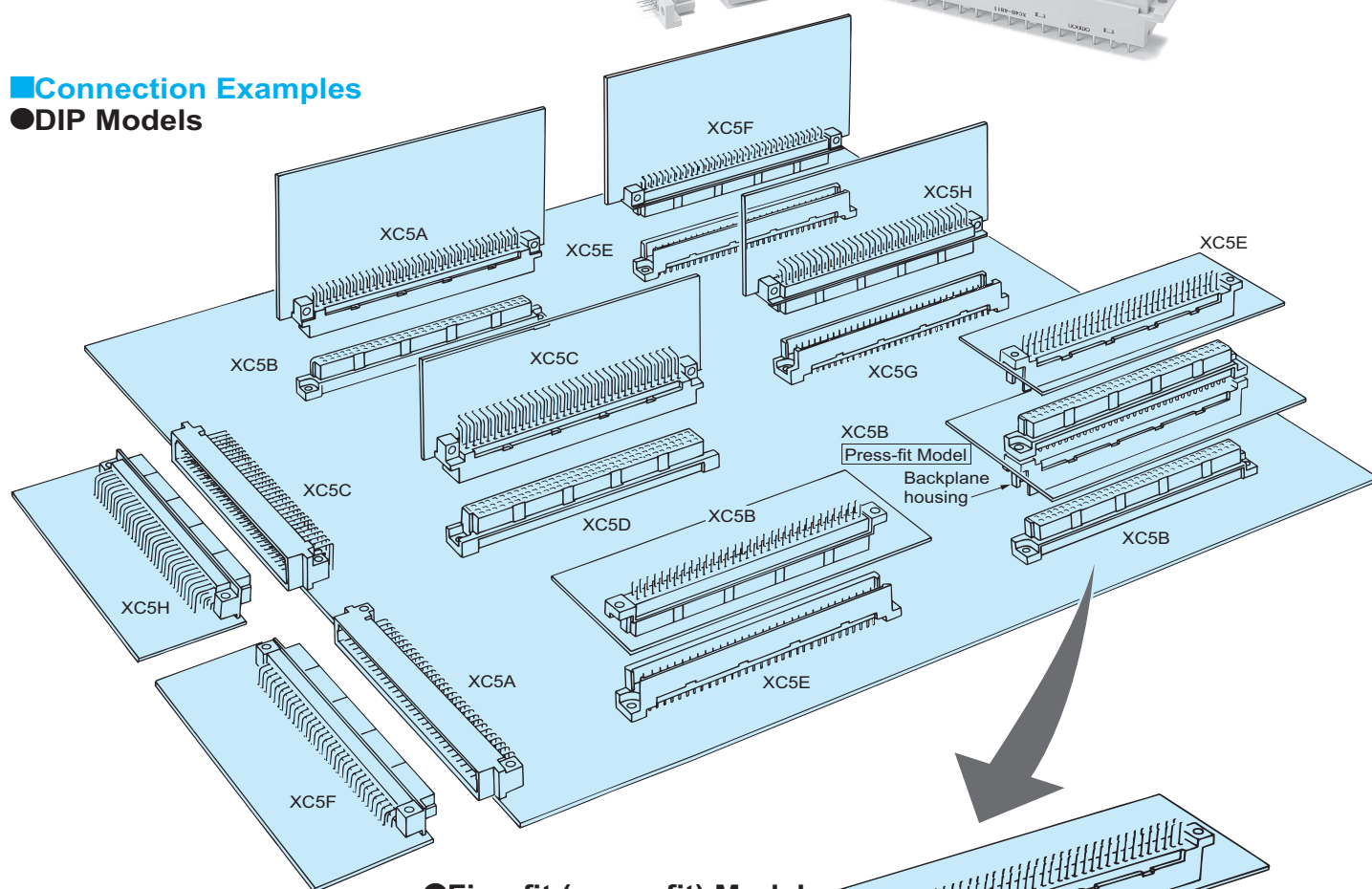
**A Wide Variety of High-density Connectors Conform to International Standards, are Highly Reliable, and Support a Wide Range of Applications**

- Lineup includes versatile DIN models that meet international DIN standards, such as standard DIN, DIN-style, and DIN fine-fit models.
- These connectors meet a variety of industrial needs.
- A comprehensive selection of accessories are available.



### ■ Connection Examples

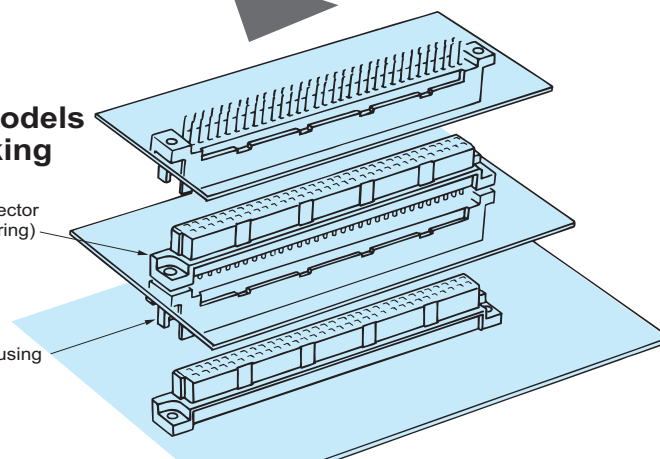
#### ● DIP Models



#### ● Fine-fit (press-fit) Models with Multi-tier Stacking

Press-fit connector  
(with no soldering)

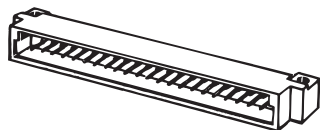
Backplane housing





## ■A wide variety of DIN connectors are available in addition to the following models.

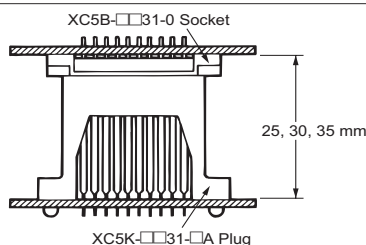
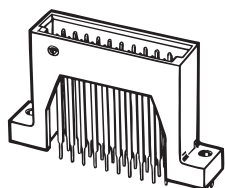
### XC5 DIN-style Connectors



|              | Standard DIN          | DIN style 1              | DIN style 2              |
|--------------|-----------------------|--------------------------|--------------------------|
| PCB mounting | <br>Fixed at PCB edge | <br>PCB surface mounting | <br>PCB surface mounting |

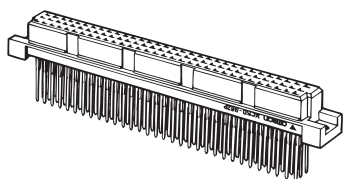
- Designed for PCB surface mounting and ideal for automatic soldering.

### XC5K High-profile Stacking Connectors



- Corresponding to a stacking height of 25, 30, or 35 mm.

### XC5 Fine-fit (press-fit) Connectors



#### ■Construction of Solderless Connecting Part (Fine-fit Part)

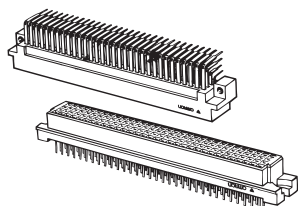


Cross Section

The cross section is in the shape of the letter W.  
The two points on the bottom work as guide rails, preventing the pins from becoming twisted.  
The fin parts on the upper part change shape to fit into the through hole of the PCB.

- Press-fitted to PCBs and so soldering or cleaning is required.
- Mounting method more efficient than manual soldering.
- Ideal for backplane systems.

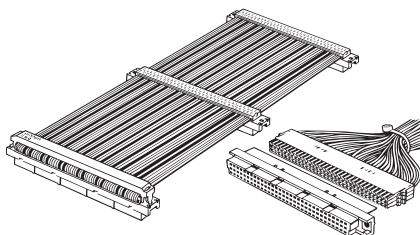
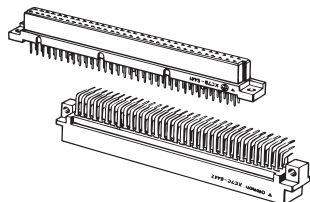
### XC5M DIN Connectors in 4 Lines with 128 Connector Poles



|       | XC5M standard DIN model          | XC5M-1 DIN style 1               | XC5N DIN style 3                |
|-------|----------------------------------|----------------------------------|---------------------------------|
| Shape | Plug<br>Right angle terminal<br> | Plug<br>Right angle terminal<br> | Socket<br>Straight terminal<br> |

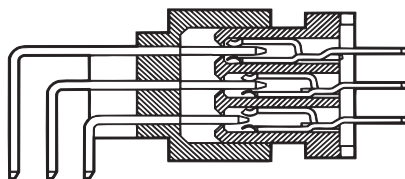
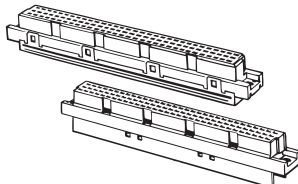
- Multi-pole connectors in 4 lines with 128 poles based on the DIN concept.

### XC6 Cable Connectors



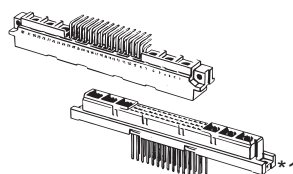
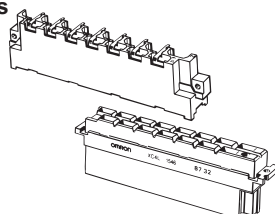
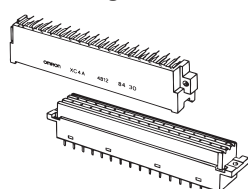
- Ideal for connecting to a variety of bus lines for rack systems.
- Allow backplanes to be constructed with ease.
- Models with 96 connector poles and models with 64 connector poles and a center-holed construction are available.

### XC7 Sequence Connectors



- Active lines can be connected to daughter boards after connecting power lines, and can be disconnected before disconnecting the power lines.
- High reliability ensured with an engagement length of 4 mm and the durability to withstand 5,000 insertions.
- Three-step sequential operation.

### XC4 Mid- and High-current Connectors



- Carry 6 to 40 A for PCB-to-PCB or PCB-to-wire applications.

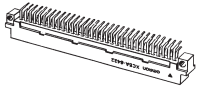
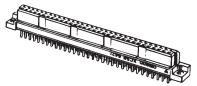
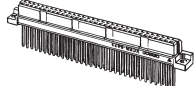
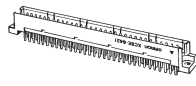
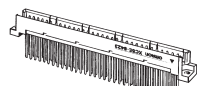
\*1 (high frequency model available)

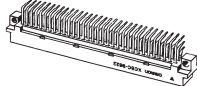
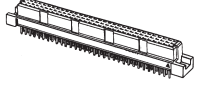
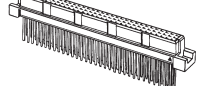
# XC5/XC6/XC7/XC2/XC4

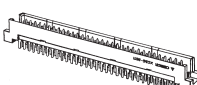
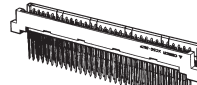
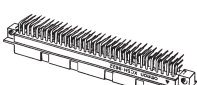
## DIN Connectors Series

### Ordering Information

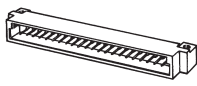
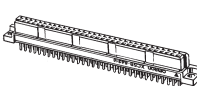
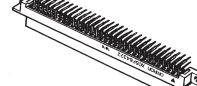
#### ●XC5 DIN Connectors

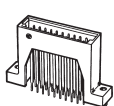
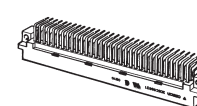
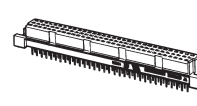
|                    | XC5A 2-Row Plugs (DIN-B Standard Models)                                                                               | XC5B 2-Row Sockets (DIN-B Standard Models)                                                                          |                                                                                                                               | XC5E DIP Plugs (DIN-Q Reverse Models)                                                                                 |                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC5A-□□22<br> | Straight terminal<br>XC5B-□□21<br> | Straight wrapping terminal<br>XC5B-□□23<br> | Straight terminal<br>XC5E-□□21<br> | Straight wrapping terminal<br>XC5E-□□23<br> |
| Number of contacts | 20,32,44,50,64,100                                                                                                     | 20,32,44,50,64,100                                                                                                  |                                                                                                                               | 20,32,44,50,64,100                                                                                                    |                                                                                                                                |

|                    | XC5F 2-Row Sockets (DIN-Q Reverse Models)                                                                              | XC5C 3-Row Plugs (DIN-C Standard Models)                                                                               | XC5D 3-Row Sockets (DIN-C Standard Models)                                                                           |                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC5F-□□22<br> | Right angle terminal<br>XC5C-□□22<br> | Straight terminal<br>XC5D-□□21<br> | Straight wrapping terminal<br>XC5D-□□23<br> |
| Number of contacts | 20,32,44,50,64,100                                                                                                     | 32,48,64,96                                                                                                            | 32,48,64,96                                                                                                          |                                                                                                                                |

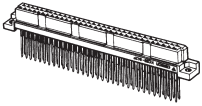
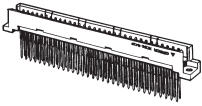
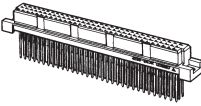
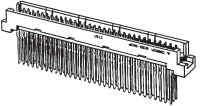
|                    | XC5G 3-Row Plugs (DIN-R Reverse Models)                                                                               |                                                                                                                                | XC5H 3-Row Sockets (DIN-R Reverse Models)                                                                                 |
|--------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Shape              | Straight terminal<br>XC5G-□□21<br> | Straight wrapping terminal<br>XC5G-□□23<br> | Right angle terminal<br>XC5H-□□22<br> |
| Number of contacts | 48,64,96                                                                                                              |                                                                                                                                | 48,64,96                                                                                                                  |

#### ●XC5 DIN-style Connectors

|                    | XC5A 2-Row Plugs (DIN Style 1)                                                                                             | XC5B 2-Row Sockets (DIN-style Compatible Models)                                                                                                        | XC5E 2-Row Plugs (DIN Style 2)                                                                                                            | XC5F 2-Row Sockets (DIN Style 2)                                                                                             |
|--------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC5A-□□82-1<br> | Straight terminal<br>XC5B-□□31-0(with coding key)<br>XC5B-□□31-3<br> | Straight terminal<br>XC5E-□□81-2<br>XC5E-□□81-3 *<br> | Right angle terminal<br>XC5F-□□32-2<br> |
| Number of contacts | 20,24,30,32,44,50,64,100                                                                                                   | 10,14,16,20,24,30,32,44,50,64,100                                                                                                                       | 10*,14*,20,24*,30,32,44,50,64,100                                                                                                         | 20,30,32,44,50,64,100                                                                                                        |

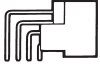
|                    | XC5K High-profile Stacking Plugs                                                                                                                                                          | XC5C 3-Row Plugs (DIN Style 1)                                                                                             | XC5D 3-Row Sockets (DIN Style Compatible)                                                                                |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Shape              | XC5K-□□31-3A with 30-mm-pitch Straight terminal<br>XC5K-□□31-2A with 25-mm-pitch Straight terminal<br> | Right angle terminal<br>XC5C-□□82-1<br> | Straight terminal<br>XC5D-□□31-0<br> |
| Number of contacts | 16,20,32                                                                                                                                                                                  | 64,96                                                                                                                      | 64,96                                                                                                                    |

### ●XC5 DIN Connectors (Fine-fit, W-shaped terminal type)

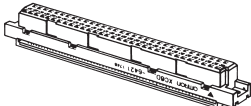
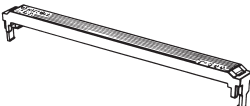
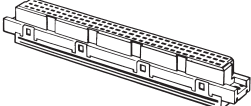
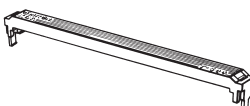
|                    | <b>XC5B 2-Row Sockets</b><br>(DIN-B Fine-fit, W-terminal Models)                                                                                                      | <b>XC5E 2-Row Plugs</b><br>(DIN-Q Fine-fit, W-terminal Models)                                                                                                        | <b>XC5D 3-Row Sockets</b><br>(DIN-C Fine-fit, W-terminal Models)                                                                                                       | <b>XC5G 3-Row Plugs</b><br>(DIN-R Fine-fit, W-terminal Models)                                                                                                          |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Straight terminal<br>XC5B-□□2P-1140 *1<br>XC5B-□□2P-1131 *2<br>XC5B-□□2P-1132 *3<br> | Straight terminal<br>XC5E-□□2P-1140 *1<br>XC5E-□□2P-1131 *2<br>XC5E-□□2P-1132 *3<br> | Straight terminal<br>XC5D-□□2P-1140 *1<br>XC5D-□□2P-1131 *2<br>XC5D-□□2P-1132 *3<br> | Straight terminal<br>XC5G-□□2P-1140 *1<br>XC5G-□□2P-1131 *2<br>XC5G-□□2P-1132 *3<br> |
| Number of contacts | 32,64,100                                                                                                                                                             | 32,64,100                                                                                                                                                             | 48,64,96                                                                                                                                                               | 48,64,96                                                                                                                                                                |

\*1: Terminal type/ Straight, 4mm \*2: Terminal type/ Straight, 13mm \*3: Terminal type/ Straight, 17mm

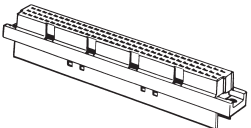
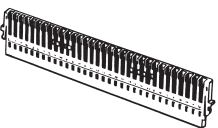
### ●XC5 DIN Connectors (4-Rows and 128 Contacts type)

|                    | <b>XC5M 4-Row Plugs</b>                                                                                                                       |                                                                                                                                         | <b>XC5N 4-Row Sockets</b>                                                                                                              |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Standard DIN<br>Right angle type terminal<br>XC5M-0222<br> | DIN Style<br>Right angle terminal<br>XC5M-0222-1<br> | DIN Style 3<br>Straight terminal<br>XC5N-0221<br> |
| Number of contacts | 128                                                                                                                                           |                                                                                                                                         | 128                                                                                                                                    |

### ●XC6 DIN Connectors (Cable Connecting type)

|                    | <b>XC6D Center-holed 2-Row Flat Cables (DIN-C Models)</b>                                                  |                                                                                                                  | <b>XC6H 3-Row Flat Cable (DIN-C Models)</b>                                                                 |                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Shape              | Socket<br>XC6D-6421<br> | Strain relief<br>XC6T-644<br> | Socket<br>XC6H-9621<br> | Strain relief<br>XC6T-644<br> |
| Number of contacts | 64                                                                                                         |                                                                                                                  | 96                                                                                                          |                                                                                                                    |

### ●XC6V DIN Connectors (IDC Connectors for Discretedwire)

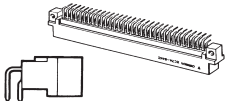
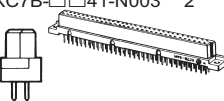
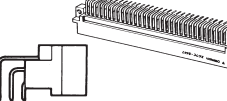
|       | Unit housing<br>XC6M-96<br> | Housing without contacts<br>XC6T-32<br> |
|-------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Shape |                                                                                                                |                                                                                                                            |

# XC5/XC6/XC7/XC2/XC4

## DIN Connectors Series

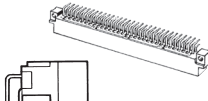
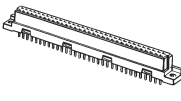
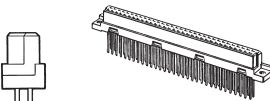
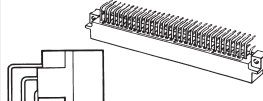
### Ordering Information

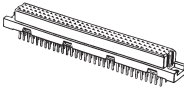
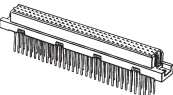
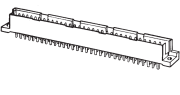
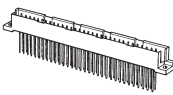
#### ●XC7 DIN Socket Sequence Connectors

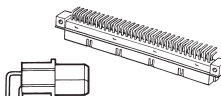
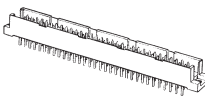
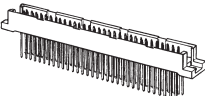
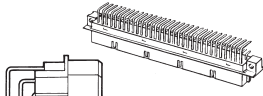
|                    | XC7A 2-Row Plugs                                                                                                               | XC7B 2-Row Sockets                                                                                                                               | XC7C 3-Row Plugs                                                                                                                | XC7D 3-Row Sockets                                                                                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC7A-□□42-N001 *1<br> | Straight terminal<br>XC7B-□□41-N001 *1<br>XC7B-□□41-N003 *2<br> | Right angle terminal<br>XC7C-9642-N001 *1<br> | Straight terminal<br>XC7D-9641-N001 *1<br> |
| Number of contacts | 64,90,100                                                                                                                      | 64,90,100                                                                                                                                        | 96                                                                                                                              | 96                                                                                                                            |

\*1:N001→Normal \*2:N003→Sequence

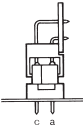
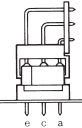
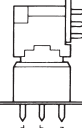
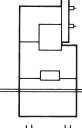
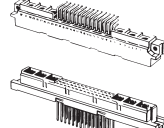
#### ●XC2 DIN Connectors

|                    | XC2A 2-Row Plugs (DIN-B standard models)                                                                               | XC2B 2-Row Sockets (DIN-B standard models)                                                                                                                                                                                                           | XC2C 3-Row Plugs (DIN-C standard models)                                                                                 |
|--------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC2A-6412<br> | Straight terminal<br>XC2B-6411<br><br>Straight wrapping terminal<br>XC2B-6413<br> | Right angle terminal<br>XC2C-□□12<br> |
| Number of contacts | 64                                                                                                                     | 64                                                                                                                                                                                                                                                   | 64,96                                                                                                                    |

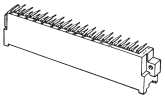
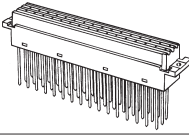
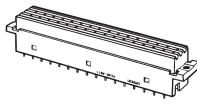
|                    | XC2D 3-Row Sockets (DIN-C standard)                                                                                                                                                                                                                     | XC2E 2-Row Plugs (DIN-Q Reverse model)                                                                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Straight terminal<br>XC2D-□□11<br><br>Straight wrapping terminal<br>XC2D-□□13<br> | Straight terminal<br>XC2E-6411<br><br>Straight wrapping terminal<br>XC2E-6413<br> |
| Number of contacts | 64,96                                                                                                                                                                                                                                                   | 64                                                                                                                                                                                                                                                         |

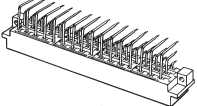
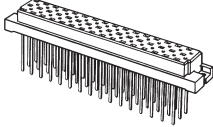
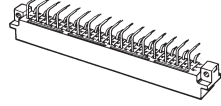
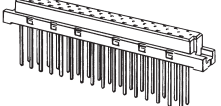
|                    | XC2F 2-Row Sockets (DIN-Q Reverse model)                                                                                 | XC2G 3-Row Plugs (DIN-R Reverse model)                                                                                                                                                                                                                   | XC2H 3-Row Sockets (DIN-R Reverse model)                                                                                   |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Shape              | Right angle terminal<br>XC2F-6412<br> | Straight terminal<br>XC2G-□□11<br><br>Straight wrapping terminal<br>XC2G-□□13<br> | Right angle terminal<br>XC2H-□□12<br> |
| Number of contacts | 64                                                                                                                       | 64,96                                                                                                                                                                                                                                                    | 64,96                                                                                                                      |

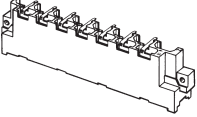
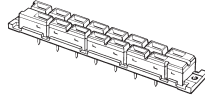
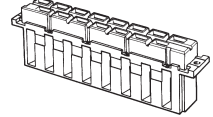
#### ●XC4 DIN types

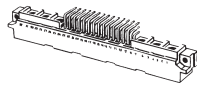
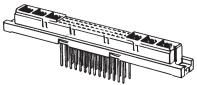
| Models | XC4G/H                                                                              | XC4E/F                                                                              | XC4A/B                                                                              | XC4K/L                                                                                | XC4M/N                                                                                |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DIN    | D                                                                                   | E                                                                                   | F                                                                                   | H                                                                                     | M                                                                                     |
| Shape  |  |  |  |  |  |

### ●XC4 DIN Connectors (Medium and High-current Connectors)

| Shape              | XC4A Plugs (DIN-F)                                                                                                     | XC4B Sockets (DIN-F)                                                                                                |                                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|                    | Right angle terminal<br>XC4A-4812<br> | Straight terminal<br>XC4B-4813<br> | Wrapping terminal<br>XC4B-4811<br> |
| Number of contacts | 48                                                                                                                     | 48                                                                                                                  |                                                                                                                      |

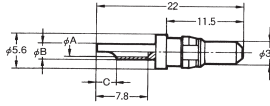
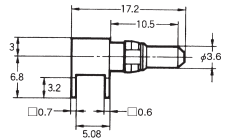
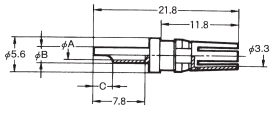
| Shape              | XC4E Plugs (DIN-E)                                                                                                     | XC4F Sockets (DIN-E)                                                                                                | XC4G Plugs (DIN-D)                                                                                                      | XC4H Sockets (DIN-D)                                                                                                  |
|--------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|                    | Right angle terminal<br>XC4E-□□12<br> | Wrapping terminal<br>XC4F-□□13<br> | Right angle terminal<br>XC4G-3212<br> | Wrapping terminal<br>XC4H-3213<br> |
| Number of contacts | 32,48                                                                                                                  | 32,48                                                                                                               | 32                                                                                                                      | 32                                                                                                                    |

| Shape              | XC4K Plugs (DIN-H)                                                                                                       | XC4L Sockets (DIN-H)                                                                                                  | XC4L Sockets(with Fastening Terminals)(DIN-H)                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
|                    | Right angle terminal<br>XC4K-1542<br> | Straight terminal<br>XC4L-1541<br> | with Fasten Terminal<br>XC4L-1546<br> |
| Number of contacts | 15                                                                                                                       | 15                                                                                                                    | 15                                                                                                                         |

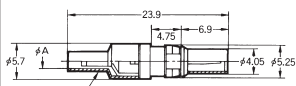
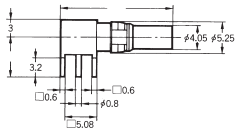
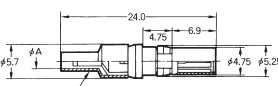
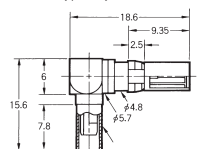
| Shape              | XC4M Plugs (DIN-M)                                                                                                       | XC4N Sockets (DIN-M)                                                                                                           |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                    | Right angle terminal<br>XC4M-□□12<br> | Straight wrapping terminal<br>XC4N-□□13<br> |
| Number of contacts | 2/78, 4/60, 6/42 *                                                                                                       | 2/78, 4/60, 6/42 *                                                                                                             |

\*: contacts/ Number of signal circuit poles

### ●XC4W High-current Contacts (for XC4M/XC4N)

| Shape | Plug with Solder Cup Terminal<br>XC4W-□□11<br> | Plug with L-shaped Solder Terminal<br>XC4W-0412<br> | Receptacle with Solder Cup Terminal<br>XC4W-□□11<br> |
|-------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|       |                                                                                                                                   |                                                                                                                                        |                                                                                                                                          |

### ●XC4W Co-axial Contacts for XC4M/XC4N

| Shape | XC4W-2111(φ2.2)<br>XC4W-2211(φ3.2)<br> | XC4W-2014<br> | XC4W-3111(φ2.2)<br>XC4W-3211(φ3.2)<br> | XC4W-3112(φ2.2)<br>XC4W-3212(φ3.2)<br> |
|-------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|       |                                                                                                                           |                                                                                                  |                                                                                                                            |                                                                                                                             |

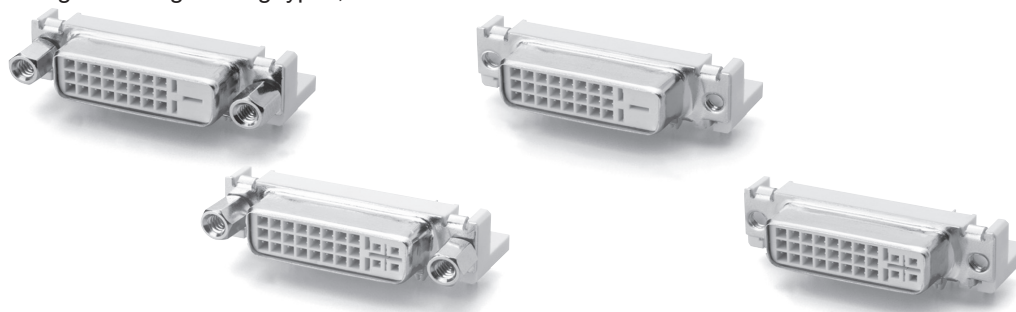


# DVI Connectors

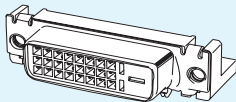
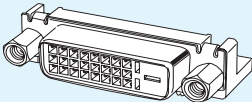
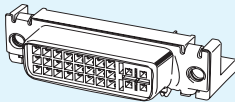
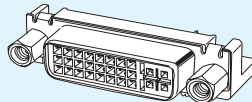
## XM4M

### OMRON DVI Connectors, Conforming to Digital Visual Interface (DVI) Standards, Transmit High-resolution Video Signals.

- Support not only the Transition Minimized Differential Signaling (TMDS), but also the conventional analog RGB transmission simultaneously.
- OMRON DVI connectors provide a bandwidth performance of maximum 2.5 GHz over analog interface.
- Support high bandwidth data transfer of maximum 9.9Gbps over digital dual link, addressing the bandwidth requirements of the next generation broadband.
- EMI shield indispensable to high-speed data transfer is fully prepared.
- Two types, digital and digital/analog sharing types, are available.



#### Ordering Information

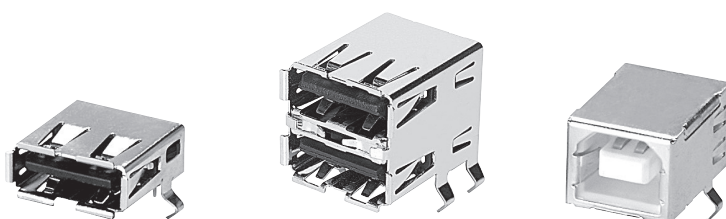
| Type        | Digital type                                                                        |                                                                                     | Digital/analog sharing type                                                          |                                                                                       |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Accessories | Without Anchor                                                                      | Inch screw (5.8 mm)                                                                 | Without Anchor                                                                       | Inch screw (5.8 mm)                                                                   |
| Series      | XM4M-2432-5012                                                                      | XM4M-2432-1312                                                                      | XM4M-2932-5012                                                                       | XM4M-2932-1312                                                                        |
| Shape       |  |  |  |  |

# USB Connectors

## XM7

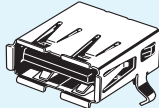
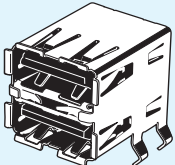
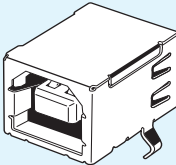
### New Compact Interface Connectors Conforming to USB Standards

- Allows connecting or disconnecting of active lines with power supplied to devices
- Structure of high resistance to twisting force during connecting or disconnecting
- Socket model A is for personal computers and USB hubs while socket model B is for peripheral devices, such as the modem, scanner, or mouse of a personal computer.

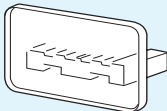
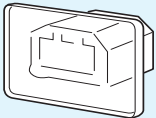


#### Ordering Information

##### ■Sockets

| Item   | Type | A type with 1-tier                                                                                                                 | A type with 2-tier                                                                                                                 | B type                                                                                                                              |
|--------|------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Shape  |      | DIP Right Angle Terminal with kink terminal<br> | DIP Right Angle Terminal with kink terminal<br> | DIP Right Angle Terminal with kink terminal<br> |
| Series |      | XM7A-0442                                                                                                                          | XM7A-0442-A                                                                                                                        | XM7B-0442                                                                                                                           |

##### ■Dust Covers

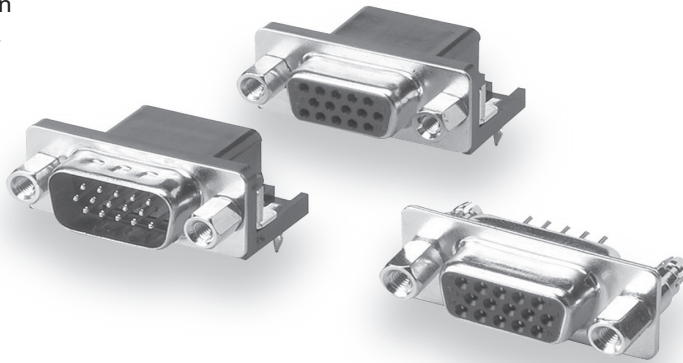
| Item   | Type | For A type                                                                          | For B type                                                                          |
|--------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Shape  |      |  |  |
| Series |      | XM7Z-0001                                                                           | XM7Z-0002                                                                           |

# XM4K/L

## High-density D-sub Connectors

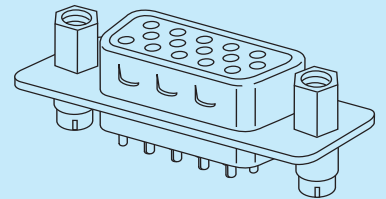
### High-density Connectors Ideal for Interfacing with Electronic Devices

- High-density construction with 15 poles in a standard 9-pole general-purpose shell.
- Shielded connectors that prevent EMI.

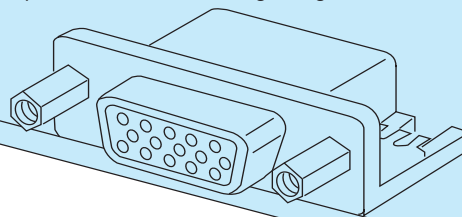


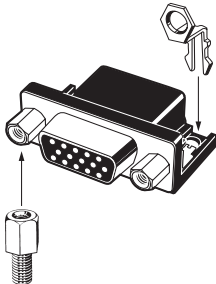
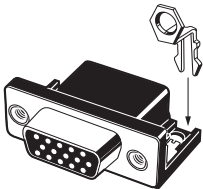
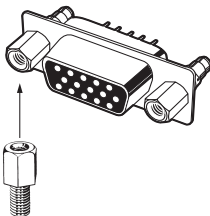
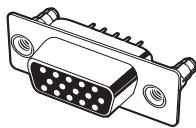
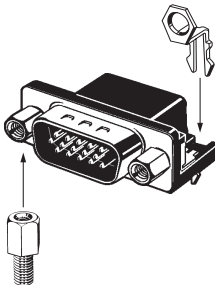
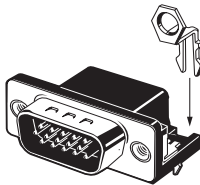
#### ■ Connection Examples

XM4L-1541-□□□  
15 Poles, Socket with DIP Straight Terminal

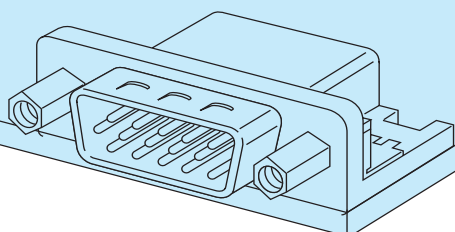


XM4L-1542-□□□  
15 poles, Socket with DIP Right Angle Terminal



|       |                                                                                                                                         |                                                                                                                                         |                                                                                                                                       |                                                                                                                                       |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Shape | <p>Socket right angle terminal<br/>XM4L-1542-132</p>   | <p>Socket right angle terminal<br/>XM4L-1542-502</p>   | <p>Socket straight terminal<br/>XM4L-1541-132</p>  | <p>Socket straight terminal<br/>XM4L-1541-502</p>  |
|       | <p>Plug right angle terminal<br/>XM4K-1542-132</p>  | <p>Plug right angle terminal<br/>XM4K-1542-502</p>  |                                                                                                                                       |                                                                                                                                       |

XM4K-1542-□□□  
15 poles, Plug with DIP Right Angle Terminal



# XM2/XM3

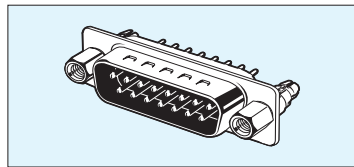
## D-sub Connectors

### D-sub Connectors Ideal for Interfacing with OA Equipment

- D-sub Connectors Ideal for Interfacing with OA Equipment.
- Shielded connectors that prevent EMI.
- Noise can be suppressed effectively by using the XM2S Plastic Hood with metallic finish.
- XM3B-F multi-hole ferrite-core models are also available. Use these models to suppress high-frequency noise and save PCB mounting space.
- Compact and tough structure with a metal shell provided.
- A wide variety of mounting brackets and grounding metals are available.

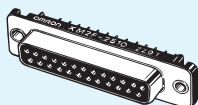
#### ■ Connection Examples

##### ■ XM2E Plug with straight terminal

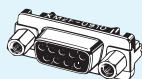


##### ■ XM2F Socket with straight terminal

With no anchor and no grounding fixture

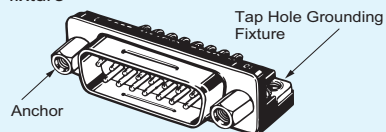


With anchor and lock pin grounding fixture

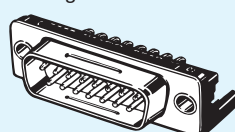


##### ■ XM2C Plug with right angle terminal

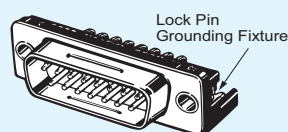
With anchor and tap hole grounding fixture



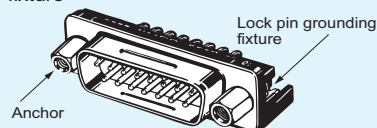
With no anchor and no grounding fixture



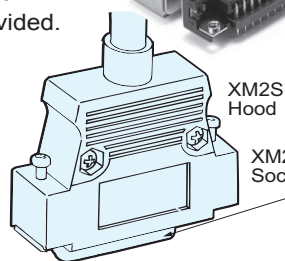
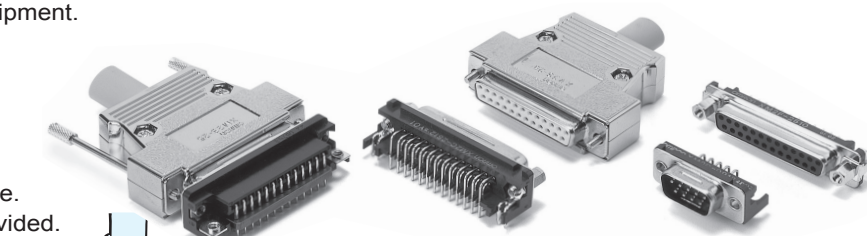
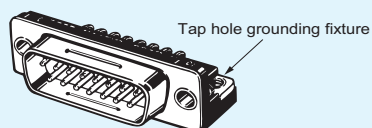
With lock pin grounding fixture



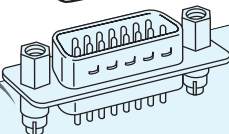
With anchor and lock pin grounding fixture



With tap hole grounding fixture

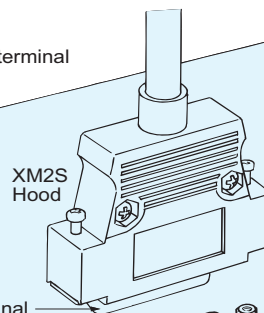


XM2S Hood  
XM2D Socket with solder cup terminal

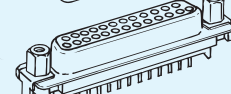


XM2E Plug with straight terminal

XM2A Plug with solder cup terminal

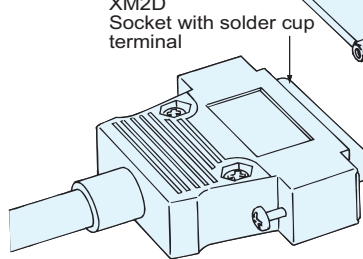


XM2S Hood



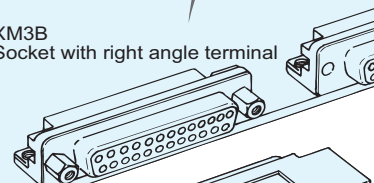
XM2F Socket with straight terminal

XM2C Plug with right angle terminal

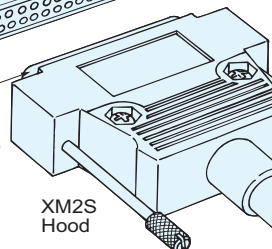


XM2D Socket with solder cup terminal

XM3B Socket with right angle terminal



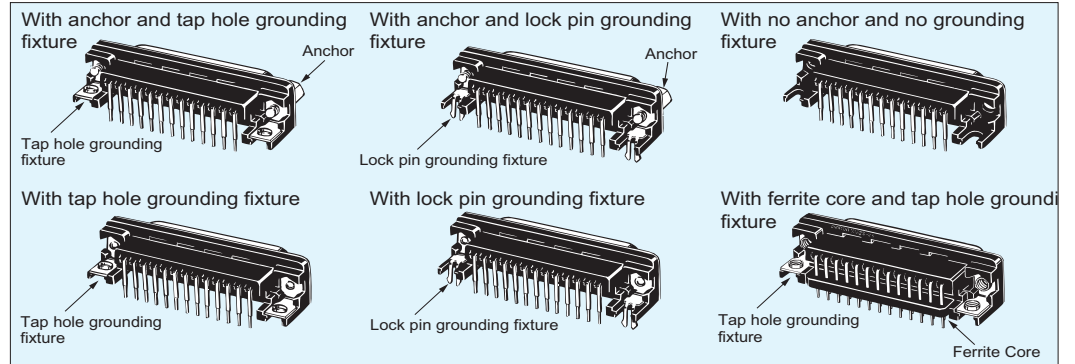
XM2A Plug with solder cup terminal



XM2S Hood



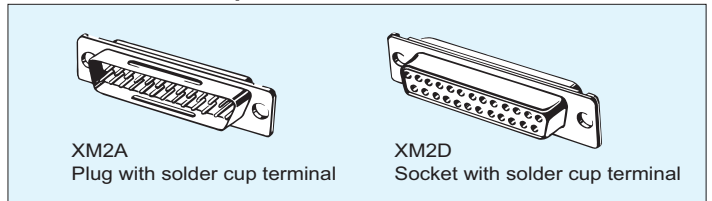
### ■XM2B Socket with right angle terminal



XM3B-F  
Socket with right  
angle terminal  
and ferrite core

XM2Z-007□  
Anchor 5 (Jackscrew)

### ■XM2A/D Solder cup terminal



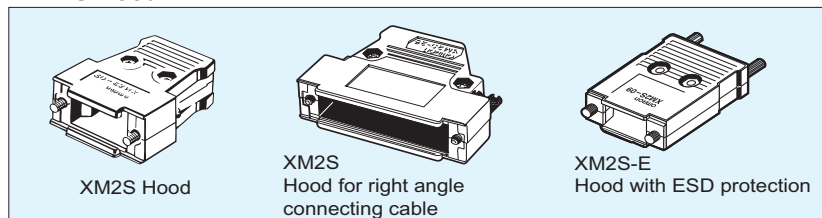
### ■XM4Z Anchoe

● "Easy-to-use" OMRON connectors ●

|                    |             |          |           |
|--------------------|-------------|----------|-----------|
| Shape              |             |          |           |
| Type of lock screw | M2.6 × 0.45 | M3 × 0.5 | #4-40 UNC |

It can be identified type of lock screw by the appearance

### ■XM4S Hood



# XR2/XR3

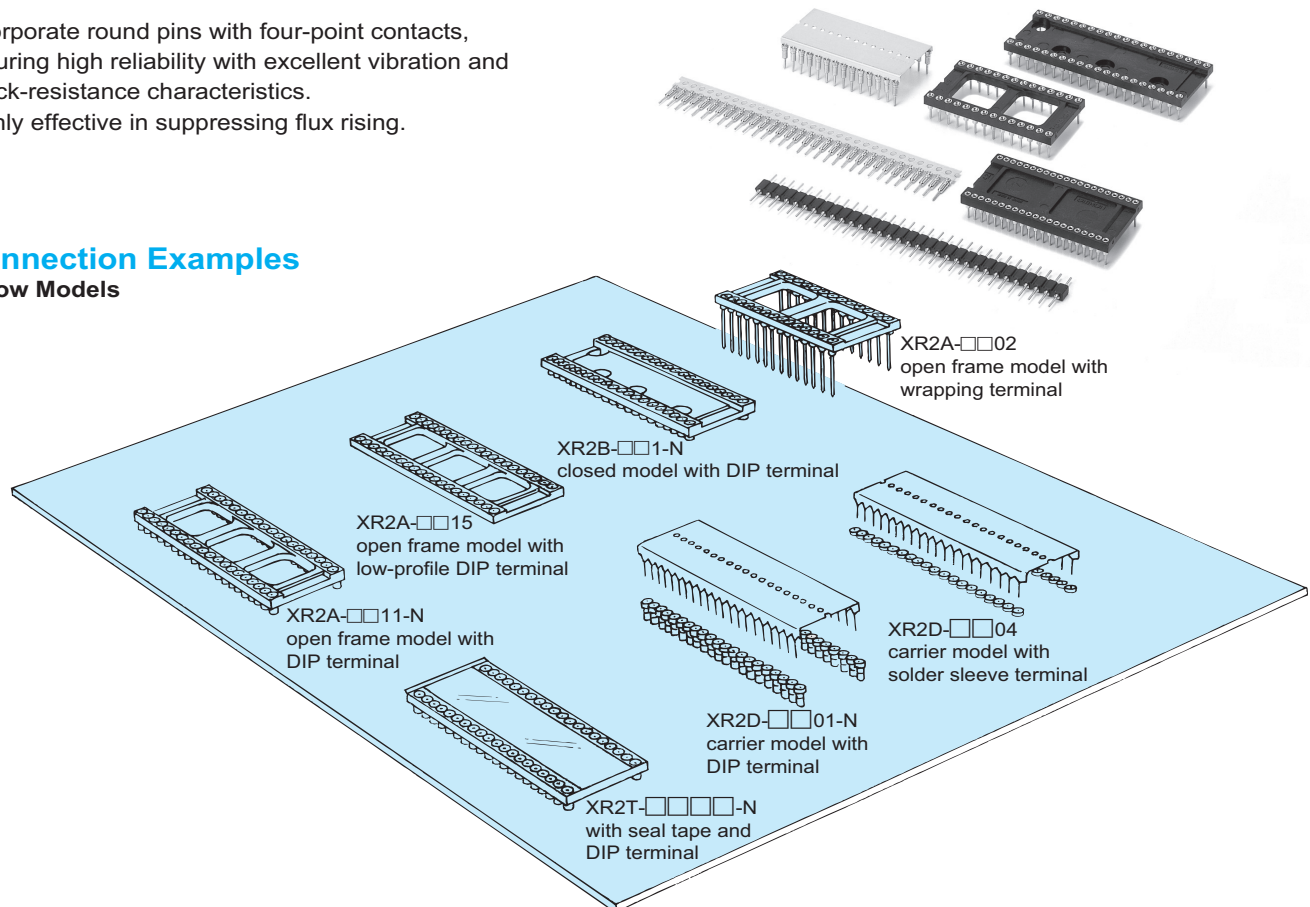
## IC Sockets

### Highly Reliable Sockets That Withstand Instantaneous Signal Failures - Ideal for High-speed Data Processing Circuits

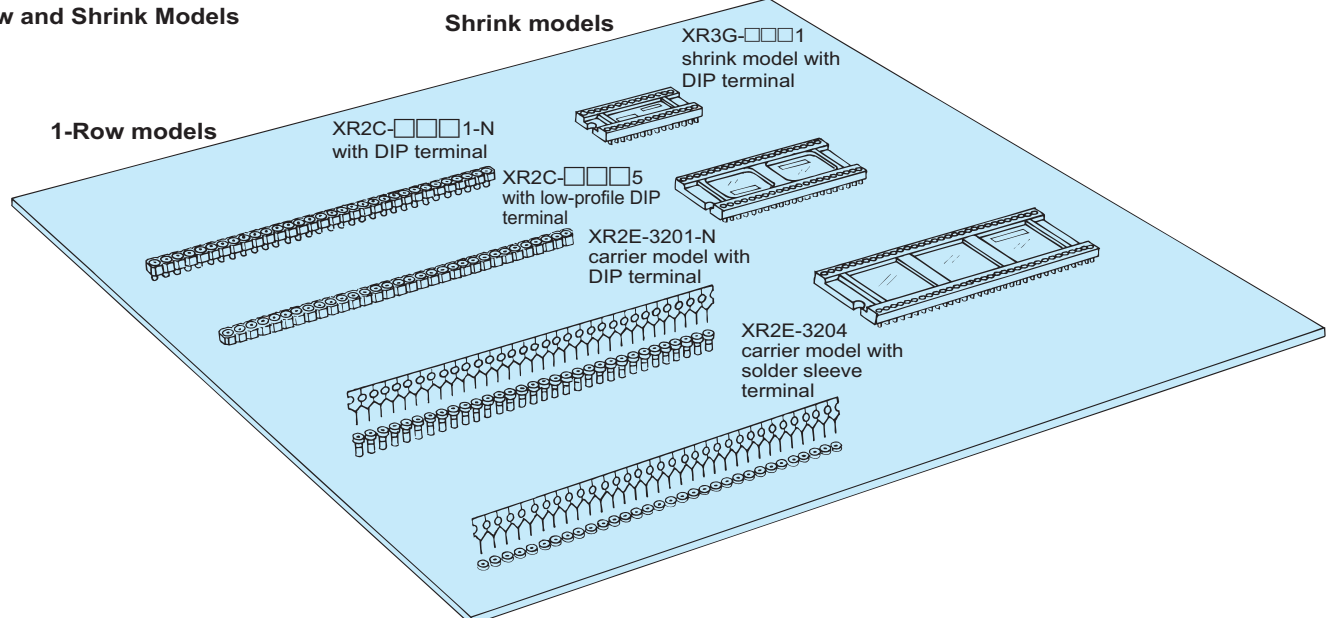
- Incorporate round pins with four-point contacts, ensuring high reliability with excellent vibration and shock-resistance characteristics.
- Highly effective in suppressing flux rising.

#### Connection Examples

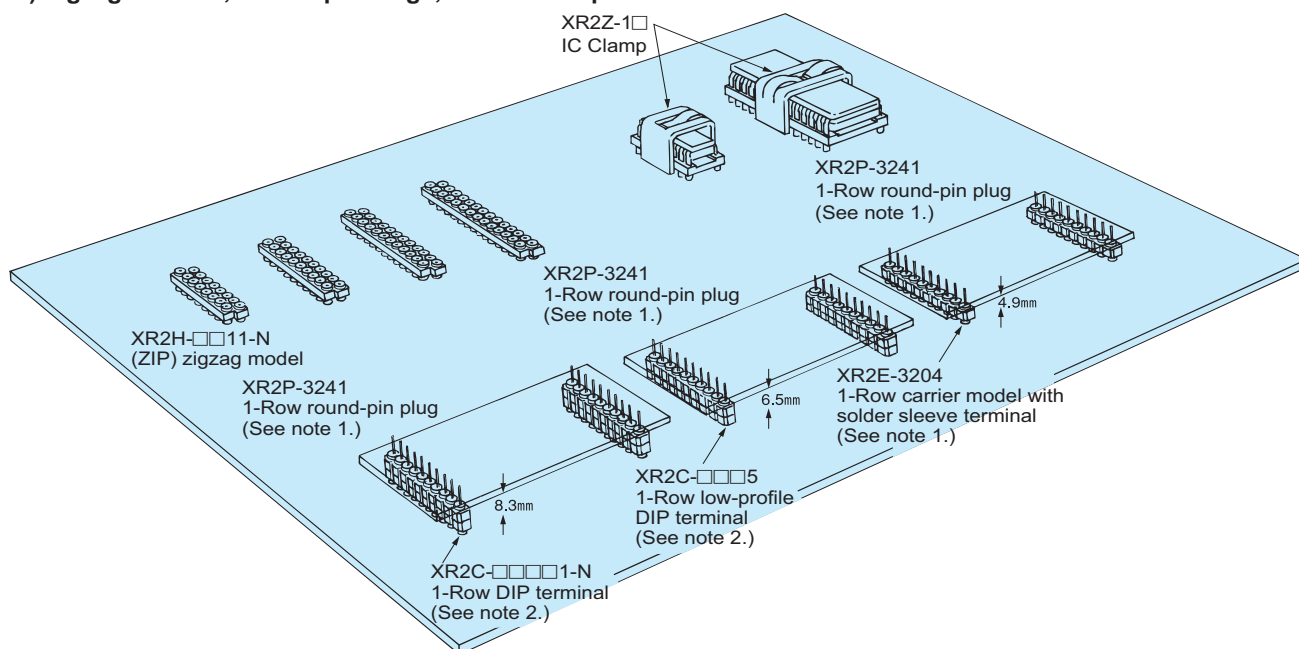
##### ● 2-Row Models



##### ● 1-Row and Shrink Models



## ●(ZIP) Zigzag Sockets, Round-pin Plugs, and IC Clamps



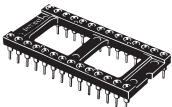
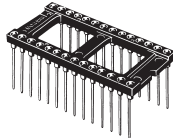
Note 1: A standard model has 32 poles. Cut the plug to the appropriate number of poles.  
 2: A standard model has 32 or 20 poles. Cut the plug to the appropriate number of poles.

# XR2/XR3

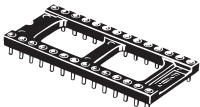
## IC Sockets

### Ordering Information

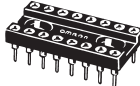
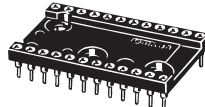
#### ●XR2A Open frame models

|                    |                                                                                                                                                                                                                                                              |                                                                                   |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Shape              | DIP terminal<br>XR2A-□□11-N *1<br>XR2A-2463-N *1 (See Note 1)<br>XR2A-2473-N *1 (See Note 2)<br>XR2A-□□01-N *2<br>XR2A-2461-N *2 (See Note 1)<br>XR2A-2471-N *2 (See Note 2)<br>XR2A-□□21-N *3<br>XR2A-2467-N *3 (See Note 1)<br>XR2A-2477-N *3 (See Note 2) | Wrapping terminal<br>XR2A-□□02                                                    |
|                    |                                                                                                                                                                             |  |
| Number of contacts | 8, 14, 16, 18, 20, 22, 24, 28, 32, 40, 42, 48, 50, 64                                                                                                                                                                                                        |                                                                                   |

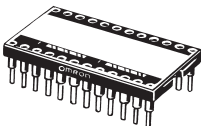
#### ●XR2A Open frame models (Low-profile DIP terminal)

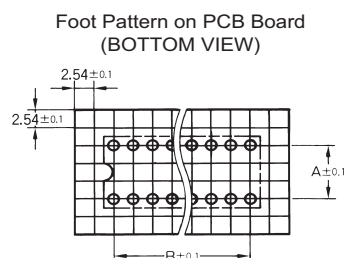
|                    |                                                                                                                                                                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | Low-profile DIP terminal<br>XR2A-□□15 *1<br>XR2A-2466 *1 (See Note 1)<br>XR2A-2476 *1 (See Note 2)<br>XR2A-□□05 *2<br>XR2A-2465 *2 (See Note 1)<br>XR2A-2475 *2 (See Note 2)<br>XR2A-□□25 *3<br>XR2A-2468 *3 (See Note 1)<br>XR2A-2478 *3 (See Note 2) |
|                    |                                                                                                                                                                     |
| Number of contacts | 8, 14, 16, 18, 20, 22, 24, 28, 32, 40, 42, 48, 64                                                                                                                                                                                                      |

#### ●XR2B Closed models

|                    |                                                                                     |                                                                                     |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Shape              | DIP terminal<br>XR2B-1611-N *1<br>XR2B-1601-N *2                                    | DIP terminal<br>XR2B-□□11-N *1<br>XR2B-□□01-N *2                                    |
|                    |  |  |
| Number of contacts | 16, 24, 28, 32, 40                                                                  |                                                                                     |

#### ●XR2T Open frame models with sealing tape

|                    |                                                                                                                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape              | DIP terminal<br>XR2T-□□11-N *1<br>XR2T-2463-N *1 (See Note 1)<br>XR2T-2473-N *1 (See Note 2)<br>XR2T-□□01-N *2<br>XR2T-2461-N *2 (See Note 1)<br>XR2T-2471-N *2 (See Note 2)<br>XR2T-□□21-N *3<br>XR2T-2467-N *3 (See Note 1)<br>XR2T-2477-N *3 (See Note 2) |
|                    |                                                                                                                                                                         |
| Number of contacts | 8,14,16,18,20,22,24,28,32,40,48                                                                                                                                                                                                                              |



Dimension Table

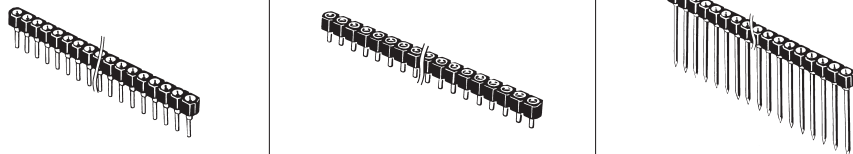
| Number of contacts | Pitch (mm) | A     | B     |
|--------------------|------------|-------|-------|
| 8                  |            | 7.62  | 7.62  |
| 14                 |            | 7.62  | 15.24 |
| 16                 |            | 7.62  | 17.78 |
| 18                 |            | 7.62  | 20.32 |
| 20                 |            | 7.62  | 22.86 |
| 22                 |            | 10.16 | 25.40 |
| 24                 |            | 15.24 | 27.94 |
| 24*                |            | 10.16 | 27.94 |
| 24**               |            | 7.62  | 27.94 |
| 28                 |            | 15.24 | 33.02 |
| 32                 |            | 15.24 | 38.10 |
| 40                 |            | 15.24 | 48.26 |
| 42                 |            | 15.24 | 50.80 |
| 48                 |            | 15.24 | 58.42 |
| 50                 |            | 22.86 | 60.96 |
| 64                 |            | 22.86 | 78.74 |

Note 1: Please refer to 24\* in Dimension Table.

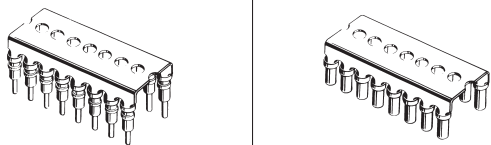
Note 2: Please refer to 24\*\* in Dimension Table.

\*1: Au 0.25μm    \*2: Au 0.75μm    \*3: Au flash

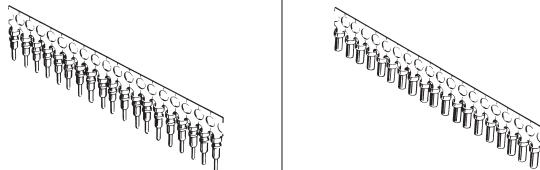
### ●XR2C 1-Row Connectors

|                    |                                                                                    |                                                                          |                                   |
|--------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------|
| Shape              | DIP terminal<br>XR2C-□□11-N *1<br>XR2C-□□01-N *2<br>XR2C-□□21-N *3                 | Low-profile DIP terminal<br>XR2C-□□15 *1<br>XR2C-□□05 *2<br>XR2C-□□25 *3 | Wrapping terminal<br>XR2C-□□02 *2 |
|                    |  |                                                                          |                                   |
| Number of contacts | 10,16,20,32                                                                        | 20,32                                                                    | 20,32                             |

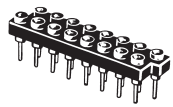
### ●XR2D 2-Row carrier models

|                    |                                                                                    |                                        |
|--------------------|------------------------------------------------------------------------------------|----------------------------------------|
| Shape              | DIP terminal<br>XR2D-□□01-N *2                                                     | Solder sleeve terminal<br>XR2D-□□04 *2 |
|                    |  |                                        |
| Number of contacts | 8,14,16,18,20,24,28,32,40                                                          |                                        |

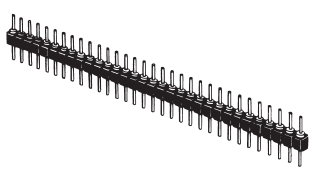
### ●XR2E 1-Row carrier models

|                    |                                                                                     |                                        |
|--------------------|-------------------------------------------------------------------------------------|----------------------------------------|
| Shape              | DIP terminal<br>XR2E-3201-N *2                                                      | Solder sleeve terminal<br>XR2E-3204 *2 |
|                    |  |                                        |
| Number of contacts | 32                                                                                  |                                        |

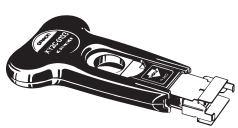
### ●XR2H ZIP (Zigzag) connectors

|                    |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|
| Shape              | DIP terminal<br>XR2H-□□11-N *1                                                        |
|                    |  |
| Number of contacts | 16,20,24,28                                                                           |

### ●XR2P 1-Row round-pin plugs

|                    |                                                                                     |
|--------------------|-------------------------------------------------------------------------------------|
| Shape              | Straight terminal<br>XR2P-□□41                                                      |
|                    |  |
| Number of contacts | 10,16,20,32                                                                         |

### ●Accessory

|       |                                                                                      |                                                                                       |                                                                                       |
|-------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Shape | IC Clamps<br>XR2Z-11                                                                 | IC Clamps<br>XR2Z-13                                                                  | IC Puller<br>XY2C-0101<br>XY2C-0103                                                   |
|       |  |  |  |



# Safety Standard

## UL(Underwriters Laboratories Inc.)



### ●Connectors

| Model        | Number of contacts                                                         | Rating          | Standard No. | File No. |
|--------------|----------------------------------------------------------------------------|-----------------|--------------|----------|
| XH2A<br>XH2B | 20,30,40,50,60,68,80,100                                                   | 0.5A AC 125V    | UL1950       | E103202  |
| XH3A<br>XH3B | 20,30,40,50,60,68,80,100,120                                               |                 |              |          |
| XH4A         | 40,60,80,100 (not including SMT pins)                                      |                 |              |          |
| XC5A         | 20,32,44,50,64,100                                                         | 2A AC 300V      | UL478        | E103202  |
| XC5B         | 20,32,44,50,64,100                                                         |                 |              |          |
| XC5C<br>XC5D | 32,48,64,96                                                                |                 |              |          |
| XC5E         | 20,32,44,50,64,100                                                         |                 |              |          |
| XC5F         | 20,32,44,50,64,100                                                         |                 |              |          |
| XC5G<br>XC5H | 48,64,96                                                                   |                 |              |          |
| XG4A<br>XG4C | 10,14,16,20,26,30,34,40,50,60,64                                           | 3A AC 300V      |              |          |
| XG4S<br>XG4T | 10,14,16,20,26,30,34,40,50,60,64                                           | 1A AC 250V      |              |          |
| XG4E<br>XG4M | 10,14,16,20,26,30,34,40,50,60,64                                           |                 |              |          |
| XG5M<br>XJ8A | 10,14,16,20,26,30,34,40,50,60,64,02                                        | 3A max. AC 300V |              |          |
| XJ8B         | 02,03,04,05,06,07,08,09,10,11,12,13,14,15,16                               | 2A AC 300V      |              |          |
| XJ8C         | 02,04,06,08,10,12,14,16                                                    |                 |              |          |
| XJ8D         | 03,06,09,12,15,18,21,24                                                    |                 |              |          |
| XM3B         | 09,15,25,37                                                                | 5A AC 300V      |              |          |
| XR2A<br>XR2B | 08,14,16,18,20,22,24,28,32,40,42,48,50,64,16,24,28,40                      | 1A AC 300V      |              |          |
| XR2C         | 03,04,05,06,07,08,09,10,11,12,13,14,15,16,18,20,21,22,23,24,26,28,30,32,64 |                 |              |          |
| XR2D         | 08,14,16,18,20,24,28,32,40                                                 |                 |              |          |
| XR2E         | 02,04,08,30,32                                                             |                 |              |          |
| XR2T         | 08,14,16,18,20,22,24,28,32,40,48                                           |                 |              |          |

## ■CSA(Canadian Standards Association)



### ●Connectors

| Model     | Number of contacts | Rating     | File No. |
|-----------|--------------------|------------|----------|
| XC5A      | 20,32,44,50,64,100 | 2A AC 300V | LR62678  |
| XC5B      | 20,32,44,50,64,100 |            |          |
| XC5C,XC5D | 32,48,64,96        |            |          |
| XC5E      | 20,32,44,50,64,100 |            |          |
| XC5F      | 20,32,44,50,64,100 |            |          |
| XC5G,XC5H | 48,64,96           |            |          |

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