

■ Precautions – Correct Use

ALL MODELS

Operating

- Ensure that the FPC has been inserted correctly and not back to front. In the event that the FPC is inserted incorrectly with the FPC connecting face not aligned with the client's design specification, this may result in the contacts becoming damaged and there is a danger that the equipment may not function properly.
- Insert the FPC right to the back of the connector. Failing to do so may result in a loss of contact reliability.
- When inserting and removing the FPC, applying pressure from above or below, left to right or at an angle may cause the FPC contacts to become damaged or detached when the FPC is removed, may result in contact failure.

Designing

- Gently pull out the FPC taking care not to apply force directly to the connector.
Bending the FPC in the area where it enters the connector or applying force to the FPC itself may result in contact failure.
- When installing the FPC at a location or on a piece of equipment that will subject the FPC to repeated oscillations or movement, please secure the FPC prior to use.
- Please use the FPC units that conform to the appropriate specifications and size as stated by OMRON.
When using a different FPC unit, or an FFC unit, please contact OMRON.
- There is a possibility that 'whiskers' may protrude from the FOC film of some of the lead-free specification FPC units; please be careful during use.
- Please observe a metal mask thickness of $t = 0.12$ to 0.15mm . The metal mask open area ratio is 90% of the printed circuit board matching dimensions as per the dimensions diagrams.

Mounting

- Do not mount (reflow or manual soldering) with the FPC inserted in the connector. Doing so may result in contact failure.
- The reflow conditions are as stated within our specifications and guidelines.
However, these conditions will change depending on the type of solder, the manufacturer, the amount of solder and the size of the circuit board and the other mount materials, etc. so please confirm the mount conditions before proceeding.
- When mounting the unit by manual soldering, please follow the instructions below to ensure contact reliability:
 1. Conditions for manual soldering: $350 \pm 10^\circ\text{C}$ 3 $\pm 1\text{sec}$
 2. Do not apply an excessive amount of solder indicated here, as it causes the flux to cease.
 3. Do not apply the soldering bit to the mount attachments with any force. Doing so may cause the connectors to alter in shape.
 4. Do not apply the soldering bit to any parts of the connector other than the mount attachments. Doing so may cause the connector to alter in shape.

LOCK TYPE (SLIDELOCK / BACKLOCK)

Operating

- Do not lock or unlock the slider with excessive force. Doing so may result in damage to the connector or contact failure.
- If a slider becomes detached it should not be used again.
- When inserting and removing the FPC, be sure to check that the slider has been unlocked first.
Utilizing the FPC in the follow ways may cause damage to or alteration to the shape of the contacts, may result in contact failure.
 1. Removing the FPC unit when the slider is still in the lock position.
 2. Removing the FPC unit by pulling it up and down or from left to right or twisting it sideways.

BACKLOCK TYPES

Operating

- Do not lock the slider without an FPC inserted.
Locking the slider without an FPC inserted will cause a decrease in the dimensions between the contacts and consequently an increase in the force required to insert and FPC.
- When locking the slider, apply pressure with your fingertips to both sides of the slider, then twist the slider until it comes away from the unit.
Failing to lock the slider properly may result in contact failure.
- Do not apply horizontally to the PCB, when locking the slider. Doing so may result in damage to the connector or contact failure.
- When unlocking the slider, place your fingers on either side or the whole of the slider and slowly lift the slider up and away.
Do not engage the slider past its primary location during the unlocking process.
Doing so may result in damage to the connector or contact failure.

Designing

- When designing the board, be sure to allow locking or performing spaces for the slider.

Mounting

- Do not perform reflow or manual soldering with the FPC inserted in the connector and the slider in the locked position.
Doing so may result in contact failure.

SLIDELOCK TYPES

Operating

- When locking the slider, apply pressure to both sides or the whole of the slider, then push the slider all the way home.
Doing so may result in contact failure.

Designing

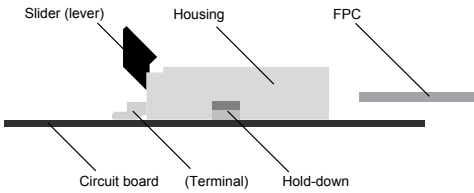
- When designing the board, be sure to allow unlocking or performing spaces for the slider.

Storage

1. Do not store in locations subject to dust or high humidity levels.
2. Do not store in locations close to sources of gasses such ammonia gas or sulphide gas.

■ Operating the Rotary Backlock

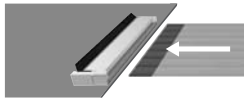
Names of each component on the FPC connector



Control Methods

Inserting the FPC

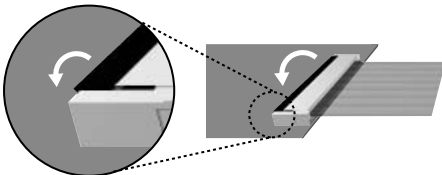
1. Insert the FPC right to the back of the connector.



The slider (lever) shown open



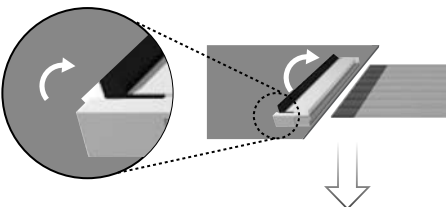
2. Activate the slider (lever) and lock the FPC in place.



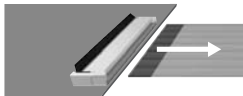
The slider (lever) shown locked

Removing the FPC

1. Move the slider (lever) upwards to disengage the locking mechanism.



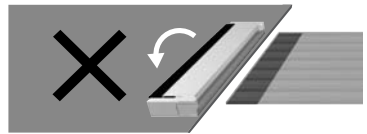
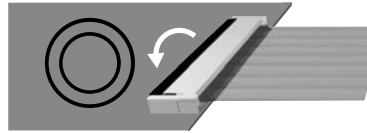
2. Once the lock has been disengaged, pull the FPC out from the unit.



Precautions During Use

Operating

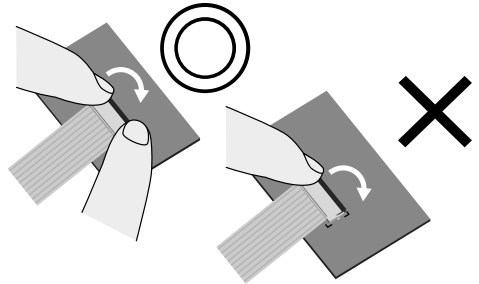
1. Do not lock the slider (lever) without an FPC inserted. Locking the slider (lever) without an FPC inserted will cause consequently an increase in the force required to insert and FPC.



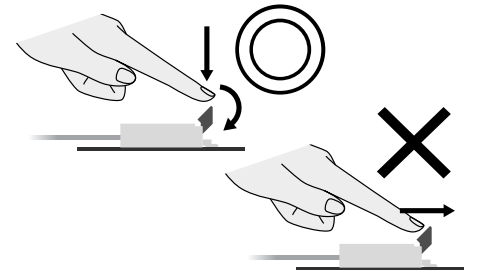
2. Do not lock or unlock the slider (lever) with excessive force. Doing so may result in damage to the connector or contact failure.

Moreover if a slider (lever) becomes detached it should not be used again.

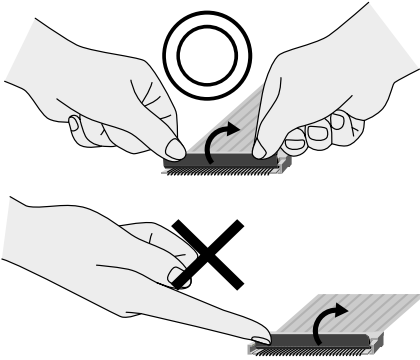
3. When locking the slider (lever), apply pressure with your fingertips to both sides of the slider (lever) and then twist the slider (lever) until it comes away from the unit. Failing to lock the slider (lever) properly may result in contact failure.



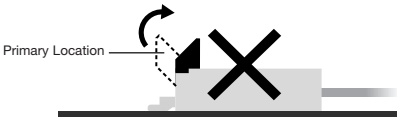
Do not apply horizontally to the PCB, when locking the slider (lever). Doing so may result in damage to the connector or contact failure.



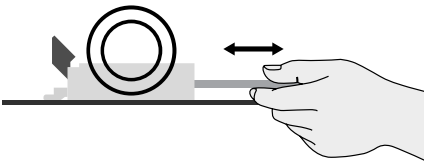
4. When unlocking the slider (lever), place your fingers on either side or the whole of the slider (lever) and slowly lift the slider (lever) up and away.



Do not engage the slider (lever) past its primary location during the unlocking process. Doing so may result in damage to the connector or contact failure.

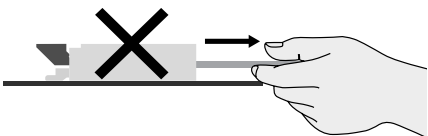


5. When inserting and removing the FPC, be sure to check that the slider (lever) has been unlocked first.

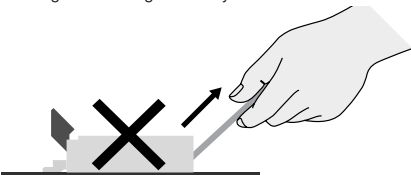


Utilizing the FPC in the follow ways may cause damage to or alteration to the shape of the contacts, may result in contact failure.

- Removing the FPC unit when the slider (lever) is still in the lock position.



- Removing the FPC unit by pulling it up and down or from left to right or twisting it sideways.



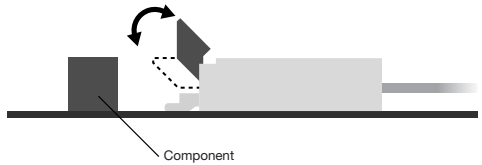
6. Ensure that the FPC has been inserted correctly and not back to front. In the event that the FPC is inserted incorrectly with the FPC connecting face not aligned with the client's design specification, this may result in the contacts becoming damaged and there is a danger that the equipment may not function properly.

Mounting

1. Do not perform reflow or manual soldering with the FPC inserted in the connector and the slider (lever) in the locked position. Doing so may result in contact failure.
2. The reflow conditions are as stated within our Primary Location and guidelines. However, these conditions will change depending on the type of solder, the manufacturer, the amount of solder and the size of the circuit board and the other mount materials, etc. so please confirm the mount conditions before proceeding.

Designing

1. Gently pull out the FPC taking care not to apply force directly to the connector. Bending the FPC in the area where it enters the connector or applying force to the FPC itself may result in contact failure.
2. When installing the FPC at a location or on a piece of equipment that will subject the FPC to repeated oscillations or movement, please secure the FPC prior to use.
3. Please use the FPC units that conform to the appropriate specifications and size as stated by OMRON. When using a different FPC unit, or an FFC unit, please contact OMRON.
4. When designing the board, be sure to allow locking or performing spaces for the slider (lever).



5. Please observe a metal mask thickness within the appropriate specifications and size as stated by OMRON. The metal mask open area ratio is 90% of the printed circuit board matching dimensions as per the dimensions diagrams.

■ Regarding Lead-Free Solder

In accordance with RoHS regulations, the solder plating specifications of FPC connector has to be lead-free (as at February 2005).

We would like to provide Sn reflow plating connector (Sn)*1 with prevention of Whisker or Gold plating connector (Au)*2, instead of solder plating type (SnPb) connector.

*1. It should be scheduled to be available in April 2005.

*2. There is no gold plating treatment type for XF2G and XH2E. No possibility for Whisker because that Gold plating type does not have Sn which is source of Whisker

■ Precautions

- There is a possibility that Whisker may occur on the FPC surface membrane when using lead-free specification solder. The customer is urged to check these prior to proceeding.
- The plating specifications for the FPC should match the metal used as plating for the connectors. Using bimetallic plating can be corrosive.

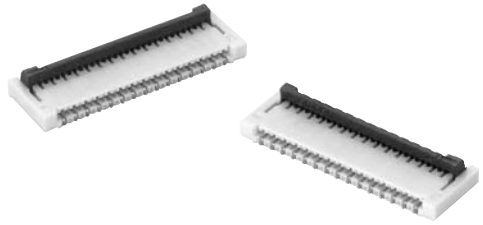
If you have any questions please contact the OMRON sales department.

Model Number	XF2C	XF2B	XF2R
			
Size mm (WxLxH)	(W) x 4.0 x 0.9	(W) x 5.4 x 1.2	(W) x 5.5 x 0.9
Type	Rear Lock	Rear Lock	Rear Lock
Contact Type	Upper	Dual	Dual
Rating	0.2A	0.2A	0.3A
Contact Resistance	Max. 80m Ω	Max. 50m Ω	Max. 40m Ω
Pitch	0.3 mm	0.3 mm	0.5 mm
Applicable FPC Thickness (mm)	0.12 mm	0.2 mm	0.12 mm
Housing Material	LCP Resin	LCP Resin	LCP Resin
Contact Material (Finish)	Copper Alloy (AU plating)	Copper Alloy (AU plating)	Copper Alloy (AU plating)
Operating Temperature	-30°C to 85°C	-30°C to 85°C	-30°C to 85°C
Embossed tape packaging:	2,000/reel	1,500/reel	3,000/reel
Page No.	962	964	966
Model Number	XF2M	XF2L	XF2J
			
Size mm (WxLxH)	(W) x 5.9 x 2.0	(W) x 3.45 x 1.2	(W) x 3.4 x 4.15
Type	Rear Lock	Slide Lock	Slide Lock
Contact Type	Dual	Upper or Lower	Top entry (Single)
Rating	0.5A	0.5A	0.5A
Contact Resistance	Max. 40m Ω	Max. 30mΩ	Max. 30mΩ
Pitch	0.5 mm	0.5 mm	0.5 mm
Applicable FPC Thickness (mm)	0.3 mm	0.3 mm	0.3 mm
Housing Material	LCP Resin	LCP Resin	PA
Contact Material (Finish)	Copper Alloy (Tin Alloy Plating) (AU plating)	Copper Alloy (Tin Alloy Plating) (AU plating)	Copper Alloy (Tin Alloy Plating) (AU plating)
Operating Temperature	-30°C to 85°C	-30°C to 85°C	-30°C to 85°C
Embossed tape packaging:	1,500/reel	3,000/reel	1,000/reel
Page No.	968	970	973

Model Number	XF2U
	
Size mm (WxLxH)	(W) x 3.5 x 0.9
Type	Rear Lock
Contact Type	Dual
Rating	0.5A
Contact Resistance	Max. 60mW
Pitch	0.5 mm
Applicable FPC Thickness (mm)	0.2mm
Housing Material	LCP Resin
Contact Material (Finish)	Copper Alloy/Nickel Substrate Gold Plated Contacts
Operating Temperature	-30°C to 85°C
Embossed tape packaging:	3,000/reel
Page No.	975

The Rotating Backlock system delivers 0.3mm pitch with 0.9-mm profile.

- RoHS Compliant.
- Depth of 4 mm (with slider closed).
- Applicable FPC thickness, $t = 0.12$ mm.
Gold-plated type.
- Wall provided on reverse side of connector to allow greater freedom of board design.
- Upper-contact type.



NEW

Specifications

■ Specifications

Rated Current	0.2A AC/DC
Rated Voltage	50V AC/DC
Contact resistance	80mΩ max. (at 20 mV max., 100 mA max.)
Insulation resistance	100MΩ min. (at 250V DC)
Withstand voltage	250V AC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	10 times
Ambient operating temperature	-30 to +85°C (No condensation at low temperatures.)

■ Materials/Finish

Housing	LCP resin (UL94V-0) / natural
Slider	LCP resin (UL94V-0) / black
Contact	Spring copper-alloy/nickel substrate (2μm) gold-plated contacts (0.15μm)

■ Ordering Information

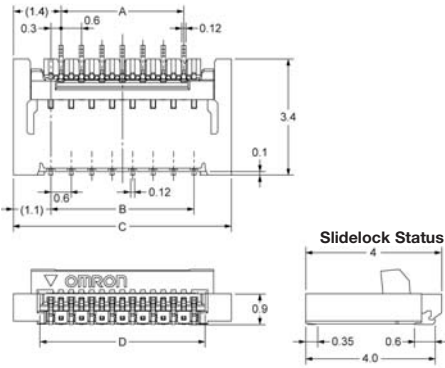
Pins (Note 1)	Model	Quantity per reel (Note 2)
17	XF2C-1755-41A	2,000
21	XF2C-2155-41A	
25	XF2C-2555-41A	
29	XF2C-2955-41A	
35	XF2C-3555-41A	
39	XF2C-3955-41A	
51	XF2C-5155-41A	

Note 1. The number of poles () figures are in development as of September 2005. Any inquiries with regard to these number of poles figures in development and to other number of poles figures should be directed to your sales representative.

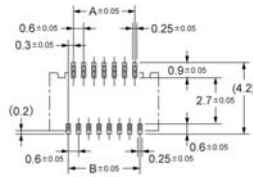
Note 2. Order an integer multiple of the quantity per reel.

■ Dimensions

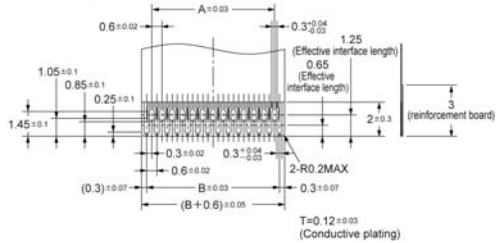
XF2C-□□□55-41A



Printing Circuit Board Dimensions (Top View)



Applicable FPC Dimensions (Top View)



■ Table of Dimensions

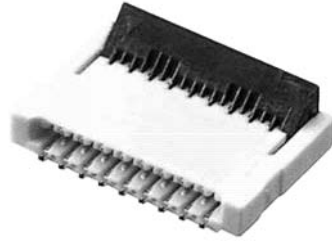
Pins (Note 1)	Model	A	B	C	D
17	XF2C-1755-41A	4.2	4.8	7.0	5.5
21	XF2C-2155-41A	5.4	6.0	8.2	6.7
25	XF2C-2555-41A	6.6	7.2	9.4	7.9
29	XF2C-2955-41A	7.8	8.4	10.6	9.1
35	XF2C-3555-41A	9.6	10.2	12.4	10.9
39	XF2C-3955-41A	10.8	11.4	13.6	12.1
51	XF2C-5155-41A	14.4	15.0	17.2	15.7

Note 1. The number of poles () figures are in development as of September 2005. Any inquiries with regard to these number of poles figures in development and to other number of poles figures should be directed to your sales representative.

Note 2. Order an integer multiple of the quantity per reel.

Rotary backlock mechanism and 0.3mm-pitch design

- RoHS Compliant.
- Wall provided on reverse side of connector to allow greater freedom of board design.
- Double-sided (upper and lower) contact structure enables component reductions.
- Applicable FPC thickness, $t = 0.2\text{mm}$. Gold-plated type.



Specifications

Rated Current	0.2A AC/DC
Rated Voltage	50V AC/DC
Contact resistance	50 mΩ max. (at 20 mV, max. 100 mA max.)
Insulation resistance	100 MΩ min. (at 250 VDC)
Withstand voltage	250V AC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	20 times
Ambient temperature	-30 to +85°C (with no icing or condensation)

Materials/Finish

Housing	LCP resin (UL94V-0)/natural
Slider	LCP resin (UL94V-0)/black
Contact	Spring copper alloy/nickel substrate (2 μm), gold-plated contacts (0.15 μm)

Ordering Information

Poles (see note 1)	Model	Quantity per reel (see note 2)
17	XF2B-1745-31A	1,500
21	XF2B-2145-31A	
23	XF2B-2345-31A	
25	XF2B-2545-31A	
27	XF2B-2745-31A	
31	XF2B-3145-31A	
33	XF2B-3345-31A	
35	XF2B-3545-31A	
39	XF2B-3945-31A	
41	XF2B-4135-31A	
45	XF2B-4545-31A	
51	XF2B-5145-31A	
61	XF2B-6155-31A*	

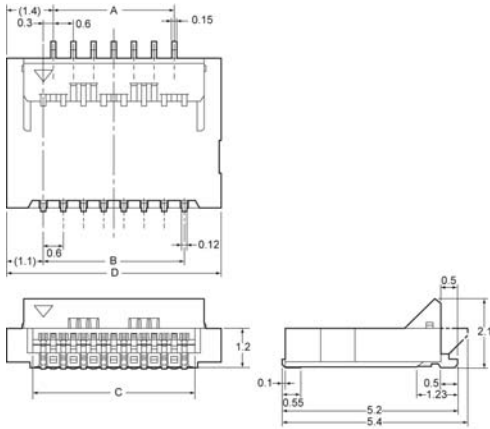
Note 1: Consult your OMRON representative for enquiries related to pin-number specifications.

Note 2: Order an integer multiple of the quantity per reel.

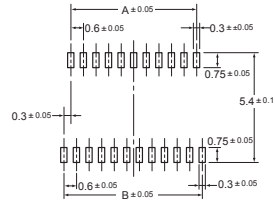
*Available in upper contact only.

■ Dimensions

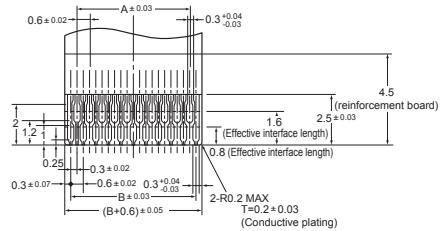
XF2B-□□45-31A



Printed Circuit Board Matching Dimensions (Top View)



Applicable FPC Dimensions



■ Table of Dimensions

Poles	Model	A	B	C	D
17	XF2B-1745-31A	4.2	4.8	5.5	7.0
21	XF2B-2145-31A	5.4	6.0	6.7	8.2
23	XF2B-2345-31A	6.0	6.6	7.3	8.8
25	XF2B-2545-31A	6.6	7.2	7.9	9.4
27	XF2B-2745-31A	7.2	7.8	8.5	10.0
31	XF2B-3145-31A	8.4	9.0	9.7	11.2
33	XF2B-3345-31A	9.0	9.6	10.3	11.8
35	XF2B-3545-31A	9.6	10.2	10.9	12.4
39	XF2B-3945-31A	10.8	11.4	12.1	13.6
41	XF2B-4145-31A	11.4	12.0	12.7	14.2
45	XF2B-4545-31A	12.6	13.2	13.9	15.4
51	XF2B-5145-31A	14.4	15.0	15.7	17.2
61	XF2B-6155-31A*	17.4	18.0	18.7	20.2

*Available in upper contact only.

ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.

To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

FPC Insertion and Work Efficiency Significantly Improved with 0.9-mm Profile and FPC Guide Section

- RoHS Compliant
- FPC Insertion greatly improved with 1.1-mm FPC guide section.
- The effective interface length for terminals has been increased to 1.4 mm to ensure stability in applications with a lot of movement.
- Double-sided (upper and lower) contact structure enables component reductions.
- Applicable FPC thickness, $t = 0.12\text{mm}$. Gold-plated type.



Specifications

Rated Current	0.3A AC/DC
Rated Voltage	50V AC/DC
Contact resistance	40 mΩ max. (at 20 mV, max. 100 mA max.)
Insulation resistance	100 MΩ min. (at 250 VDC)
Withstand voltage	250V AC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	20 times
Ambient operating temperature	-30 to +85°C (with no icing or condensation)

Materials/Finish

Housing	LCP resin (UL94V-0)/natural
Slider	LCP resin (UL94V-0)/brown
Contact	Spring copper alloy/nickel substrate (2μm), gold-plated contacts (0.15 μm)
Hold Down	Spring copper alloy/fused-tin plating (1.5 μm)

Ordering Information

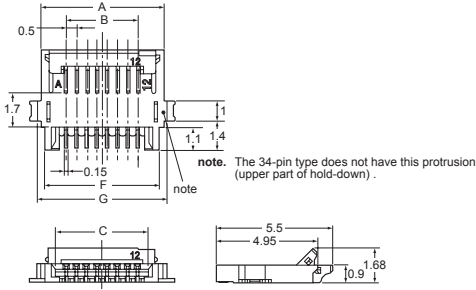
Pins (See note 1)	Model	Quantity per reel (See note 2)
6	XF2R-0615-4A	3,000
9	XF2R-0915-4A	
18	XF2R-1815-4A	
24	XF2R-2415-4A	
34	XF2R-3415-4A	
40	XF2R-4015-4A	

Note 1: Consult your OMRON representative for enquiries related to pin-number specifications.

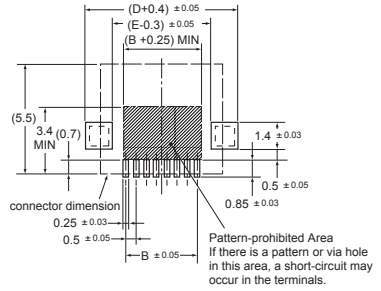
Note 2: Order an integer multiple of the quantity per reel.

■ Dimensions

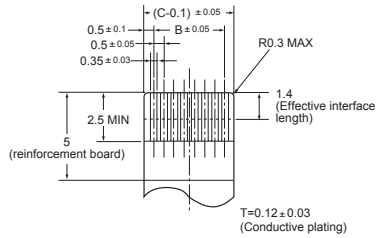
XF2R-□□15-4A



Printed Circuit Board Matching Dimensions (Top View)



Applicable FPC Dimensions



■ Table of Dimensions

Poles	Model	A	B	C	D	E	F	G
6	XF2R-0615-4A	5.0	2.5	3.6	6.1	4.1	4.55	5.35
9	XF2R-0915-4A	6.5	4.0	5.1	7.6	5.6	6.05	6.85
18	XF2R-1815-4A	11.0	8.5	9.6	12.1	10.1	10.55	11.35
24	XF2R-2415-4A	14.0	11.5	12.6	15.1	13.1	13.55	14.35
34	XF2R-3415-4A	19.0	16.5	17.6	20.1	18.1	18.55	-
40	XF2R-4015-4A	22.0	19.5	20.6	23.1	21.1	21.55	22.35

ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.

To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Rotary lock achieves high reliability and superior work efficiency

- Short body with depth of 5.9mm (with slider closed).
- Double-sided (upper and lower) contact structure enables component reductions.
- Applicable FPC thickness, $t = 0.3\text{mm}$.



Specifications

Rated Current	0.5A AC/DC
Rated Voltage	50V AC/DC
Contact resistance	40 mΩ max. (at. 20 mV, max. 100 mA max.)
Insulation resistance	100 MΩ min. (at 250 VDC)
Withstand voltage	250V AC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	20 times
Ambient temperature	-30 to +85°C (with no icing or condensation)

Materials/Finish

Housing	LCP resin (UL94V-0)/natural
Slider	LCP resin (UL94V-0)/black
Contact	Spring copper alloy/nickel substrate (2 μm), gold plated contacts (0.15 μm)
Hold Down	Spring copper alloy/fused tin plating (1.5 μm)

Ordering Information

Pin	Model (see note 1)	Quantity per reel
10	XF2M-1015-1□	1500
12	XF2M-1215-1□	
14	XF2M-1415-1□	
18	XF2M-1815-1□	
20	XF2M-2015-1□	
22	XF2M-2215-1□	
24	XF2M-2415-1□	
26	XF2M-2615-1□	
30	XF2M-3015-1□	
32	XF2M-3215-1□	
33	XF2M-3315-1□	
34	XF2M-3415-1□	
35	XF2M-3515-1□	
36	XF2M-3615-1□	
38	XF2M-3815-1□	
40	XF2M-4015-1□	
42	XF2M-4215-1□	
45	XF2M-4515-1□	
50	XF2M-5015-1□	
(55)	XF2M-5515-1□*	
(60)	XF2M-6015-1□*	

Note 1: According to the stated specifications, the aperture at the end of the unit shall be plated.

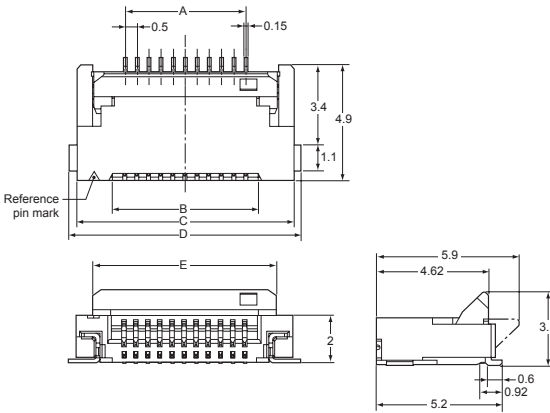
A: Gold-plated (lead-free)

L: Lead solder (tin-lead SnPb alloy solder)

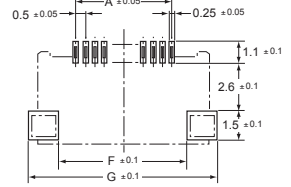
*(W) x 6.2 D x 2.1 H

■ Dimensions

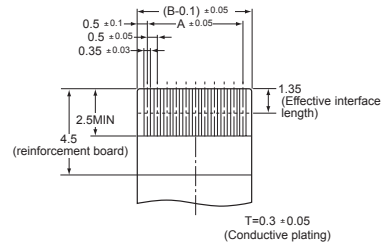
XF2M-□□15-1F



Printed Circuit Board Matching Dimensions (Top View)



Applicable FPC Dimensions



■ Table of Dimensions

Pins (see note 1)	Model (see note 2)	A	B	C	D	E	F	G
10	XF2M-1015-1□	4.5	5.6	8.5	9.1	7.1	6.1	9.5
12	XF2M-1215-1□	5.5	6.6	9.5	10.1	8.1	7.1	10.5
14	XF2M-1415-1□	6.5	7.6	10.5	11.1	9.1	8.1	11.5
18	XF2M-1815-1□	8.5	9.6	12.5	13.1	11.1	10.1	13.5
20	XF2M-2015-1□	9.5	10.6	13.5	14.1	12.1	11.1	14.5
22	XF2M-2215-1□	10.5	11.6	14.5	15.1	13.1	12.1	15.5
24	XF2M-2415-1□	11.5	12.6	15.5	16.1	14.1	13.1	16.5
26	XF2M-2615-1□	12.5	13.6	16.5	17.1	15.1	14.1	17.5
30	XF2M-3015-1□	14.5	15.6	18.5	19.1	17.1	16.1	19.5
32	XF2M-3215-1□	15.5	16.6	19.5	20.1	18.1	17.1	20.5
33	XF2M-3315-1□	16.0	17.1	20.0	20.6	18.6	17.6	21.0
34	XF2M-3415-1□	16.5	17.6	20.5	21.1	19.1	18.1	21.5
35	XF2M-3515-1□	17.0	18.1	21.0	21.6	19.6	18.6	22.0
36	XF2M-3615-1□	17.5	18.6	21.5	22.1	20.1	19.1	22.5
38	XF2M-3815-1□	18.5	19.6	22.5	23.1	21.1	20.1	23.5
40	XF2M-4015-1□	19.5	20.6	23.5	24.1	22.1	21.1	24.5
42	XF2M-4215-1□	20.5	21.6	24.5	25.1	23.1	22.1	25.5
45	XF2M-4515-1□	22.0	23.1	26.0	26.6	24.6	23.6	27.0
50	XF2M-5015-1□	24.5	25.6	28.5	29.1	27.1	26.1	29.5

Note 1: According to the stated specifications, the aperture at the end of the unit shall be plated.

A: Gold-plated (lead-free)

L: Lead solder (tin-lead SnPb alloy solder)

Note 2: Contact your local Omron representative for any enquiries with regard to the number of poles.

ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.

To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Industry – smallest on-board area and low-profile construction enhance board design freedom.

- Occupies smallest on-board area in the industry.
- Low profile only 1.2 mm max. above the board.
- Connector terminals on the lower surface are not exposed achieving high board-design efficiency
- Secure locking
- Applicable FPC thickness, $t = 0.3\text{mm}$



Specifications

■ Specifications

Rated Current	0.5A AC/DC
Rated Voltage	50V AC/DC
Contact resistance	30 mΩ max. (max. 20 mV, 100 mA)
Insulation resistance	100 MΩ min. (at 250 VDC)
Withstand voltage	250 VAC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	20 times
Ambient temperature	-30 to +85°C (No condensation at low temperatures.)

■ Materials/Finish

	Upper Contact Type	Lower Contact Type
Housing	LCP Resin (UL94V-0)/natural	
Slider	LCP resin (UL94V-0)/black	LCP resin UL94V-0)/brown
Contact	Spring copper-alloy/nickel substrate (2μm)/gold plated contacts (0.15 μm)	
Hold-down	Spring copper-alloy/fused-tin plating (1.5μm)	

■ Ordering Information

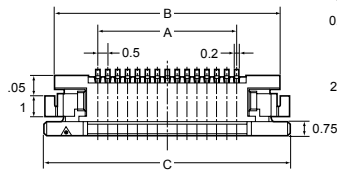
Poles	Type	Model (note 1)	Poles	Type	Model (note 1)	Quantity per reel
4	Upper Contact	XF2L-0425-1 □	13	Upper Contact	XF2L-1325-1 □	3,000
5	Lower Contact	XF2L-0535-1 □		Lower Contact	XF2L-1335-1 □	
6	Upper Contact	XF2L-0625-1 □	15	Lower Contact	XF2L-1535-1 □	
	Lower Contact	XF2L-0635-1 □		18	Upper Contact	
7	Upper Contact	XF2L-0725-1 □	19		Lower Contact	XF2L-1835-1 □
	Lower Contact	XF2L-0735-1 □		20	Lower Contact	XF2L-1935-1 □
8	Upper Contact	XF2L-0825-1 □	21		Upper Contact	XF2L-2125-1 □
	Lower Contact	XF2L-0835-1 □		22	Lower Contact	XF2L-2235-1 □
9	Upper Contact	XF2L-0925-1 □	24		Lower Contact	XF2L-2435-1 □
10	Upper Contact	XF2L-1025-1 □		26	Upper Contact	XF2L-2625-1 □
	Lower Contact	XF2L-1035-1 □	30		Upper Contact	XF2L-3025-1 □
12	Upper Contact	XF2L-1225-1 □		30	Lower Contact	XF2L-3035-1 □
	Lower Contact	XF2L-1235-1 □				

Note 1: According to the stated specifications, the aperture at the end of the unit shall be plated

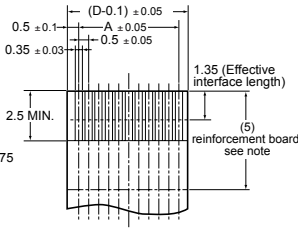
- A: Gold-plated (lead-free)
 - L: Lead solder (tin-lead SnPb alloy solder)
- Soldering plate specifications will apply until March 2006.

■ Dimensions

XF2L-□□□5-1□

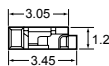
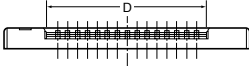


Applicable FPC Dimensions



Note 1: Use polyimide and thermoset adhesive for reinforcement film material.

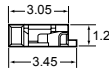
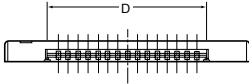
XF2L-□□□25-1 (Upper Contact Type)



With slider open



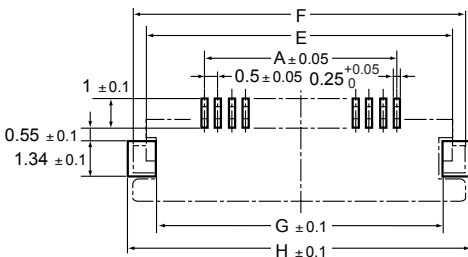
XF2L-□□□35-1 (Lower Contact Type)



With slider open



Printed Circuit Board Matching Dimension (Top View)



■ Table of Dimensions

Upper Contact Type

Poles	Model	A	B	C	D	E	F	G	H
4	XF2L-0425-1□	1.5	5.9	6.9	2.6	5.88	6.88	5.28	7.28
6	XF2L-0625-1□	2.5	6.9	7.9	3.6	6.88	7.88	6.28	8.28
7	XF2L-0725-1□	3.0	7.4	8.4	4.1	7.38	8.38	6.78	8.78
8	XF2L-0825-1□	3.5	7.9	8.9	4.6	7.88	8.88	7.28	9.28
9	XF2L-0925-1□	4.0	8.4	9.4	5.1	8.38	9.38	7.78	9.78
10	XF2L-1025-1□	4.5	8.9	9.9	5.6	8.88	9.88	8.28	10.28
12	XF2L-1225-1□	5.5	9.9	10.9	6.6	9.88	10.88	9.28	11.28
13	XF2L-1325-1□	6.0	10.4	11.4	7.1	10.38	11.38	9.78	11.78
18	XF2L-1825-1□	8.5	12.9	13.9	9.6	12.88	13.88	12.28	14.28
21	XF2L-2125-1□	10.0	14.4	15.4	11.1	14.38	15.38	13.78	15.78
26	XF2L-2625-1□	12.5	16.9	17.9	13.6	16.88	17.88	16.28	18.28
30	XF2L-3025-1□	14.5	18.9	19.9	15.6	18.88	19.88	18.28	20.28

Lower Contact Type

Poles	Model	A	B	C	D	E	F	G	H
5	XF2L-0535-1□	2.0	6.4	7.4	3.1	6.38	7.38	5.78	7.78
6	XF2L-0635-1□	2.5	6.9	7.9	3.6	6.88	7.88	6.28	8.28
7	XF2L-0735-1□	3.0	7.4	8.4	4.1	7.38	8.38	6.78	8.78
8	X2FL-0835-1□	3.5	7.9	8.9	4.6	7.88	8.88	7.28	9.28
10	XF2L-1035-1□	4.5	8.9	9.9	5.6	8.88	9.88	8.28	10.28
12	XF2L-1235-1□	5.5	9.9	10.9	6.6	9.99	10.88	9.28	11.28
13	XF2L-1335-1□	6.0	10.4	11.4	7.1	10.38	11.38	9.78	11.78
15	XF2L-1535-1□	7.0	11.4	12.4	8.1	11.38	12.38	10.78	12.78
18	XF2L-1835-1□	8.5	12.9	13.9	9.6	12.88	13.88	12.28	14.28
19	XF2L-1935-1□	9.0	13.4	14.4	10.1	13.38	14.38	12.78	14.78
20	XF2L-2035-1□	9.5	13.9	14.9	10.6	13.88	14.88	13.28	15.28
22	XF2L-2235-1□	10.5	14.9	15.9	11.6	14.88	15.88	14.28	16.28
24	XF2L-2435-1□	11.5	15.9	16.9	12.6	15.88	16.88	15.28	17.28
30	XF2L-3035-1□	14.5	18.9	19.9	15.6	18.88	19.88	18.28	20.28

Top-entry ZIF Connector

- Slider achieves secure locking.
- Low-profile, protruding only 4.15 mm on the PCB.
- Adhesion face on top of the connector suits automatic mounting.
- Models with reverse terminal arrangement also available.
- Applicable FPC thickness, $t = 0.3\text{mm}$.



Specifications

■ Specifications

Rated Current	0.5A AC/DC
Rated Voltage	50 V AC/DC
Contact resistance	30 mΩ max. (at 20 mV, 100 mA)
Insulation resistance	100 MΩ min. (at 250 VDC)
Withstand voltage	250 VAC 1 min. (leakage current: 1 mA max.)
Insertion tolerance	30 times
Ambient temperature	-30 to +85°C (No condensation at low temperatures.)

■ Materials/Finish

Housing	PA46 resin (UL94V-0)/natural
Slider	PPS resin (UL94V-0)/black
Contact	Spring copper-alloy/nickel substrate (2 μm) gold plated contacts (0.15 μm)
Hold Down	Spring copper-alloy/fused-tin plating (1.5 μm)

■ Ordering Information

Poles	Model		Quantity per reel*
	Standard Terminal Arrangement	Reverse Terminal Arrangement	
6	XF2J-0624-11□	XF2J-0624-12□	1,000
8	XF2J-0824-11□	XF2J-0824-12□	
10	XF2J-1024-11□	XF2J-1024-12□	
12	XF2J-1224-11□	XF2J-1224-12□	
14	XF2J-1424-11□	–	
16	XF2J-1624-11□	XF2J-1624-12□	
18	XF2J-1824-11□	XF2J-1824-12□	
20	XF2J-2024-11□	XF2J-2024-12□	
22	XF2J-2224-11□	XF2J-2224-12□	
24	XF2J-2424-11□	XF2J-2424-12□	
26	XF2J-2624-11□	–	
28	XF2J-2824-11□	–	
30	XF2J-3024-11□	–	
40	–	XF2J-4024-12□	

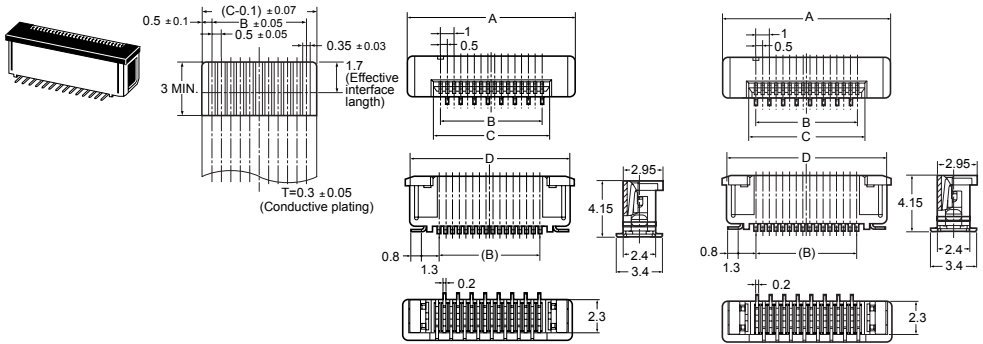
Note 1: According to the stated specifications, the aperture at the end of the unit shall be plated
 A: Gold-plated (lead-free)
 L: Lead solder (tin-lead SnPb alloy solder)

■ Dimensions

XF2J-□□24-11

Applicable FPC Dimensions Standard Terminal Arrangement

Reverse Terminal Arrangement



■ Table of Dimensions

Poles	Model		A	B	C	D
	Standard Terminal Arrangement	Reverse Terminal Arrangement				
6	XF2J-0624-11□	XF2J-0624-12□	7.5	2.5	3.6	6.9
8	XF2J-0824-11□	XF2J-0824-12□	8.5	3.5	4.6	7.9
10	XF2J-1024-11□	XF2J-1024-12□	9.5	4.5	5.6	8.9
12	XF2J-1224-11□	XF2J-1224-12□	10.5	5.5	6.6	9.9
14	XF2J-1424-11□	-	11.5	6.5	7.6	10.9
16	XF2J-1624-11□	XF2J-1624-12□	12.5	7.5	8.6	11.9
18	XF2J-1824-11□	XF2J-1824-12□	13.5	8.5	9.6	12.9
20	XF2J-2024-11□	XF2J-2024-12□	14.5	9.5	10.6	13.9
22	XF2J-2224-11□	XF2J-2224-12□	15.5	10.5	11.6	14.9
24	XF2J-2424-11□	XF2J-2424-12□	16.5	11.5	12.6	15.9
26	XF2J-2624-11□	-	17.5	12.5	13.6	16.9
28	XF2J-2824-11□	-	18.5	13.5	14.6	17.9
30	XF2J-3024-11□	-	19.5	14.5	15.6	18.9
40	-	XF2J-4024-12□	25.1	19.5	20.6	24.3

ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.

To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Rotary Backlock Mechanism (0.5-mm Pitch, Double-sided Contact) with a Depth of 3.5 mm and Low On-board Profile of 0.9 mm

- Ultra-slim connector with a depth of 3.5 mm.
- Double-sided contacts reduce the number of parts.
- Wide moulding wall on the bottom of the connector allows greater freedom in board design.
- Gold plated with an applicable FPC thickness of 0.2 mm.



■ Specifications

Rated current	0.5 A AC/DC
Rated voltage	50 V AC/DC
Contact resistance	60 mΩ max. (at 20 mV max., 100 mA max.)
Insulation resistance	100 MΩ min. (at 250 V DC)
Withstand voltage	250 V AC for 1 min. (leakage current: 1 mA max.)
Insertion tolerance	20 times
Ambient operating temperature	-30 to 85°C (with no icing or condensation)

■ Materials and Finish

Housing	LCP resin (UL94V-0)/natural
Slider	LCP resin (UL94V-0)/black
Contacts	Spring copper alloy/nickel substrate (2 μm), gold-plated contacts (0.15 μm)

■ Ordering Information

Pins (See note 1.)	Model	Quantity per reel (See note 2.)
(4)	XF2U-0415-3A	3,000
(14)	XF2U-1415-3A	
20	XF2U-2015-3A	
24	XF2U-2415-3A	
(27)	XF2U-2715-3A	
30	XF2U-3015-3A	
(32)	XF2U-3215-3A	
40	XF2U-4015-3A	

Note: 1. The models with the number of pins in parentheses are under development as of September 2005. Consult your OMRON representative for inquiries related to pin number specifications.

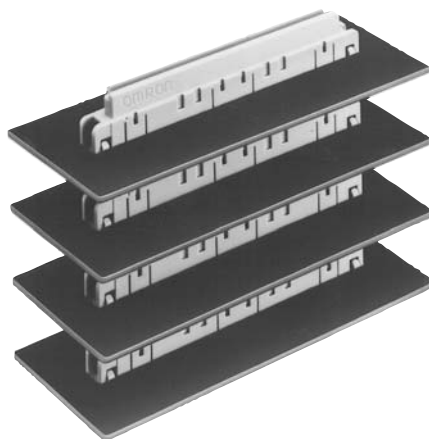
2. Order an integer multiple of the quantity per reel.

RoHS Compliance and Pin Number Specifications

Refer to the following website for the latest information. <http://www.omron.co.jp/ecb/>

Half-pitch Fine-fit Connectors Achieve High-density Mounting without Soldering

- Solderless connection eliminates soldering and washing processes.
- Multi-level stacking conserves board space.
- Requires half the space of conventional DIN connectors (OMRON's XC5B).
- At a stacking height of 16.8 mm, the XH3 can be stacked together with DIN connectors.
- Mates with conventional XH3-series Half-pitch Connectors.
- Allows press fitting using commercial tools.



Specifications

Rated current	0.5 A
Rated voltage	125 VAC
Contact resistance (See note)	40 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min. (leakage current: 1 mA max.)
Connector insertion force	0.78 N max. per contact
Connector removal force	0.05 N min. per contact
Insertion tolerance	50 times
Ambient temperature	Operating: -55 to 105°C (with no icing)

Note: The contact resistance is for the XH3B-013-D32 combined with the XH3B-013P-D5F (with the XH3B-013-D32 terminal used as the plug).

Materials and Finish

Connector	Housing	PBT resin with glass (UL94V-0)/grey
	Locator	Polyester elastomer (UL94V-0)/black
	Contacts	Socket
		Short terminal
		Backplane terminal
		Copper alloy/nickel base, 0.15-mm gold plating
		Copper alloy/nickel base, gold flash plating
		Copper alloy/nickel base, 0.15-mm gold plating
	Backplane connector housing/short terminal connector rear cover	PBT resin with glass (UL94V-0)/grey

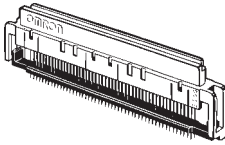
Applicable Fine-fit PCBs

PCB thickness	1.6 mm	
Through holes	Finished diameter	0.5±0.05 mm diameter (drill bit diameter 0.55+0.05 mm)
	Plating specifications	5 μm min. solder with 25 μm min. copper base
PCB materials	Glass-epoxy board	

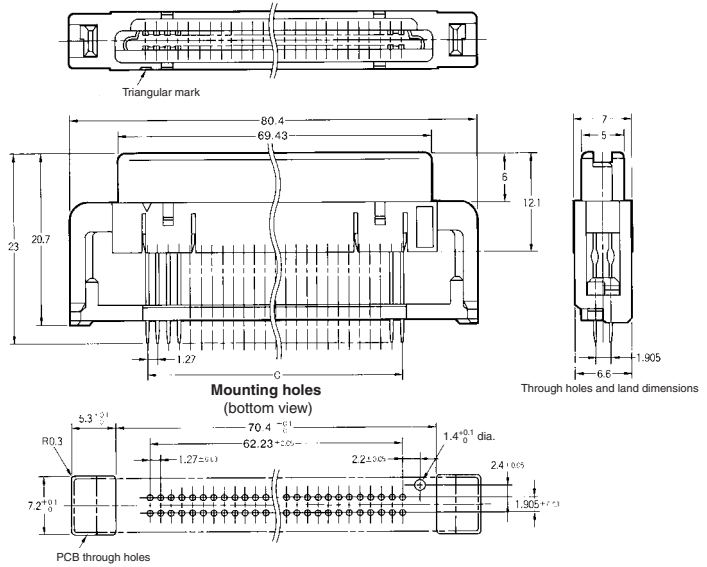
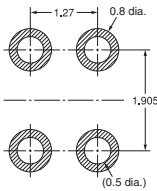
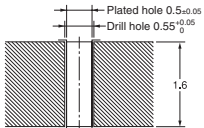
XH3B Socket, Fine-fit Backplane Connectors

■ Dimensions

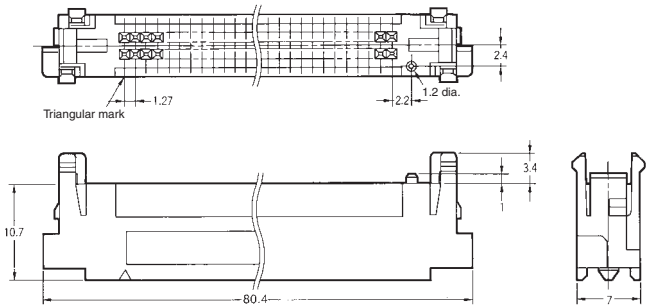
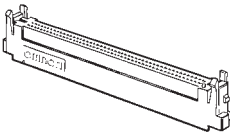
XH3B-013P-D32
(Backplane Connectors)



Though holes and dimensions

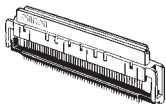


XH3C-0112
(Backplane Connector Housings)



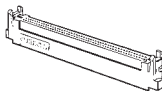
■ Ordering Information

Socket/Backplane Connectors



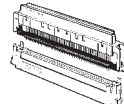
No. of contacts	Model
100	XH3B-013P-D32

Backplane Connector Housings



No. of contacts	Model
100	XH3C-0112

Set of Connectors and Housings

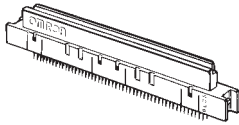


No. of contacts	Model
100	XH3B-013P-D32-C

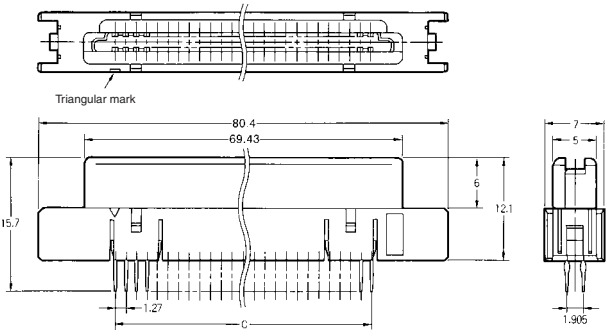
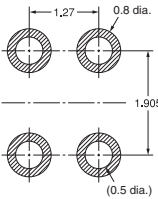
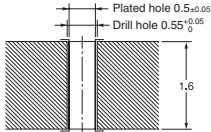
XH3B Socket, Fine-fit Short Terminal Connectors

■ Dimensions

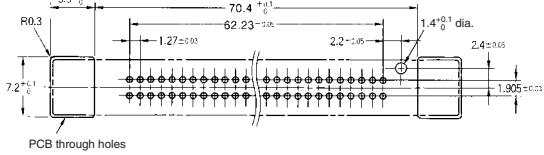
XH3B-013P-D5F
(Short Terminal Connectors)



Through holes and land dimensions

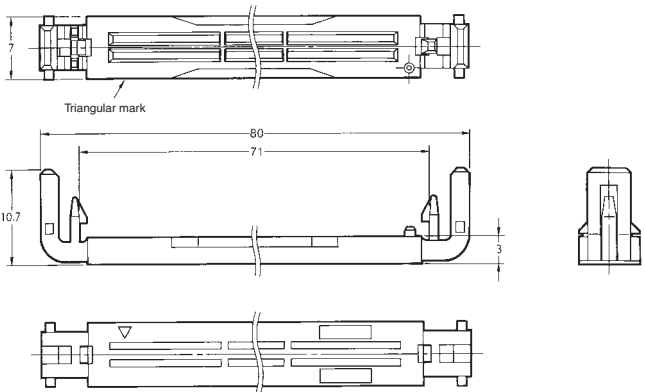
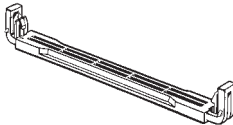


Mounting holes
(bottom view)

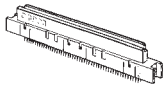


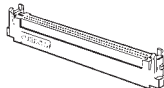
XH3S-0111

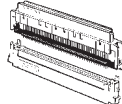
(Short Terminal Connector Rear Covers)



■ Ordering Information

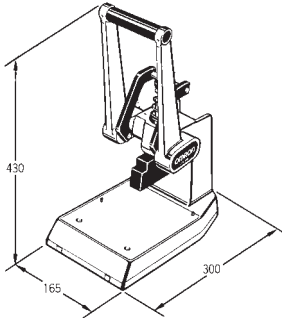
Socket/Short Terminal Connectors	
	
No. of contacts	Model
100	XH3B-013P-D5F

Short Terminal Connector Rear Covers	
	
No. of contacts	Model
100	XH3C-0111

Set of Connectors and Rear Covers	
	
No. of contacts	Model
100	XH3B-013P-D5F-S

■ Special Tools

XY2B-0002
Press Fit Device

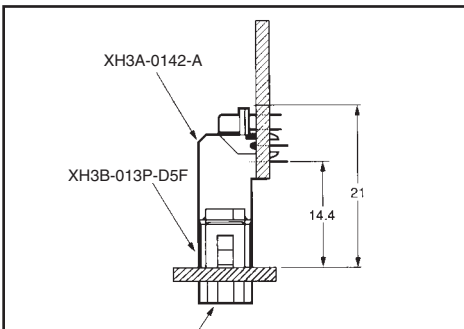


- The Press Fit Device also serves as IDC for flat cable connectors (OMRON's XG4/XG2).
- The optional pressing plate used for press fitting is required. (Contact your OMRON representative.)

Model
XY2B-0002

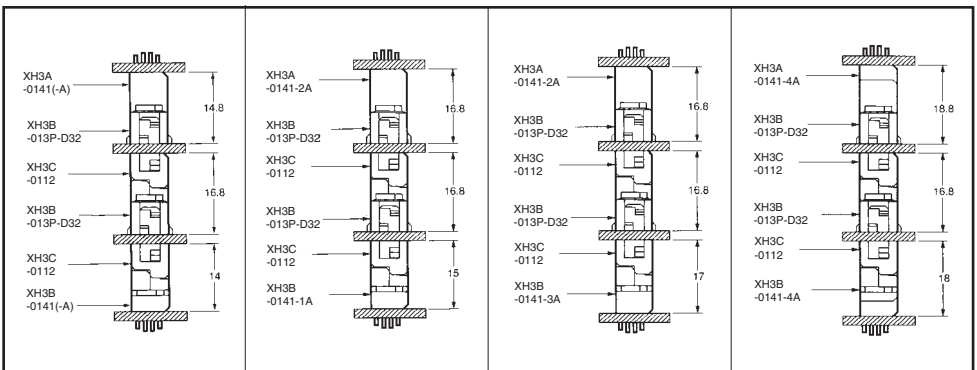
■ Mating Diagram

Vertical

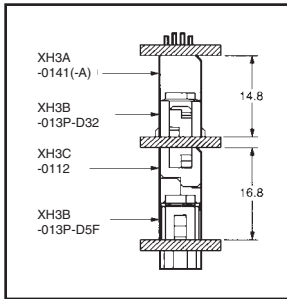


Stacking

■ Fine-fit Backplane Connector and DIP Terminal Combinations



PCB height dimensions (mm)	XH3B-013P-D□□	XH3B-0141(-A)	XH3B-0141-1(A)	XH3B-0141-3(A)	XH3B-0141-4(A)
XH3C-0112	16.8	14.0	15.0	17.0	18.0
XH3A-0141(-A)	14.8	---			
XH3A-0141-2(A)	16.8	---			
XH3A-0141-4(A)	18.8	---			



- Fine-fit Backplane Connector and Fine-fit Short Terminal Connector Combinations

■ Contact Numbers

Item Model	Mated diagram	Mounting holes (bottom view)
Socket, Fine-fit Backplane Connector/ Short Terminal Connectors		
Plug, Straight DIP Terminals		

- Contact numbers are not printed on the connectors. Use the triangular mark (▼) as a guide when designing and mounting to boards.
- On the mating side, the row of terminals on the triangular mark side are called row a, and the row on the other side is called row b. The numbers are in the order shown.
- The triangular marks on the plug and socket must be aligned when mated. The contact numbers on both sides must match.

■ Precautions

Correct Use

Press Fitting

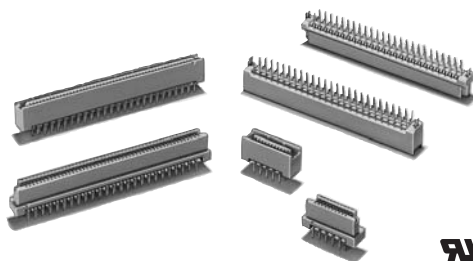
A separate instruction sheet for press fitting precautions is available. Ask your OMRON representative for details.

Mating Compatibility

XH3 Half-pitch Connectors do not mate with XH2 or XH4 Half-pitch Connectors.

Screw Mount Eliminated to Save Space. Adjustable Stacking Space of 12 to 20 mm Adds Greater Flexibility.

- The stacking space can be adjusted from 12 to 20 mm in 1-mm increments.
- A pitch of 1.27 mm for high-density mounting in double-row arrangements.
- A quadruple-row staggered arrangement (1.27 x 1.905 mm) for board connection.
- All models incorporate fastening pins to secure the terminals, thus preventing floating or falling over during soldering.
- Leaf contact construction enables smooth mating and resistance to bending.
- Space saving mating length of 3.1 mm.
- Press fitting assures long-term contact quality. The gold/palladium plating has been improved for better contact reliability.
- The XH3 conforms to EN, IEC, UL (file no. E103202), and CSA (file no. LR62678).
- Not mated with XH2 and XH4 Half-pitch Connectors.
- A special finish improves flux resistance (Straight Terminals only, 3- and 4-mm Connectors not included).



Specifications

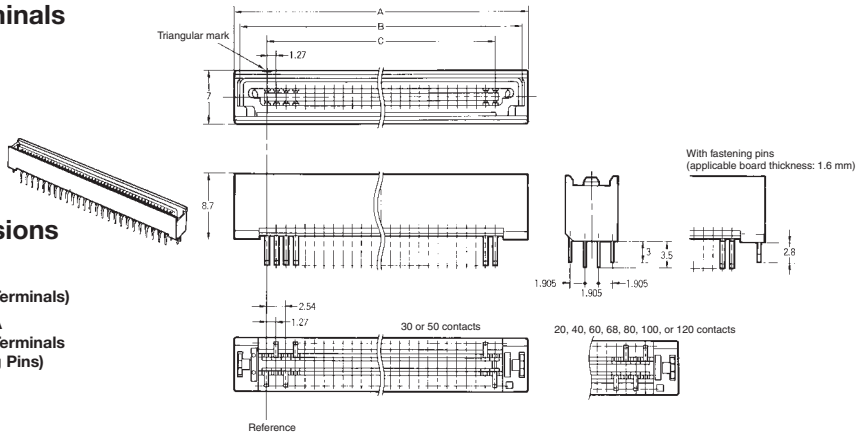
Rated current	0.5 A
Rated voltage	125 VAC
Contact resistance	30 mΩ max. (20 mV, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min. (leakage current: 1 mA max.)
Overall insertion force	0.78 N max. per contact
Connector removal force	0.10 N min. per contact
Insertion tolerance	400 times
Ambient temperature	Operating: -55 to 105°C (with no icing)

Note: The contact resistance is for the XH3A-□□41 combined with the XH3B-□□41.

Materials and Finish

Item	Type	Plug	Socket
Housing		PBT resin with glass (UL94V-0)/grey	
Locator		PBT resin with glass (UL94V-0)/grey	
Contacts	Mating end	Phosphor bronze/nickel base, gold/palladium plating	Phosphor bronze/nickel base, gold/ palladium plating
	Terminal	Phosphor bronze/nickel base, gold, flash plating	Phosphor bronze/nickel base, gold, flash plating
Fastening pins		Phosphor bronze/tin plating	

XH3A Plug, Straight DIP Terminals

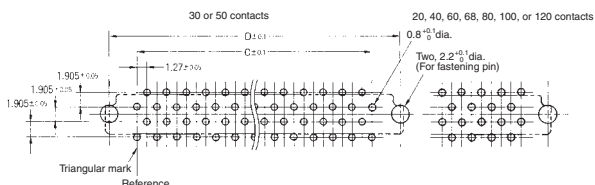


■ Dimensions

XH3A-□□41
XH3A-□□41
(Straight DIP Terminals)

XH3A-□□41-A
(Straight DIP Terminals
with Fastening Pins)

Mounting holes (bottom view)



Dimensions

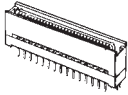
No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.7	11.43	18.54
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34
120		83.5	82.2	74.93	82.04

■ Ordering Information

No. of contacts	Model	Plug/Straight DIP Terminals	Plug/Straight DIP Terminals with fastening pins (See note.)
20	XH3A-2041		XH3A-2041-A
30	XH3A-3041		XH3A-3041-A
40	XH3A-4041		XH3A-4041-A
50	XH3A-5041		XH3A-5041-A
60	XH3A-6041		XH3A-6041-A
68	XH3A-6841		XH3A-6841-A
80	XH3A-8041		XH3A-8041-A
100	XH3A-0141		XH3A-0141-A
120	XH3A-0241		XH3A-0241-A

Note: Applicable board thickness is 1.6 mm.

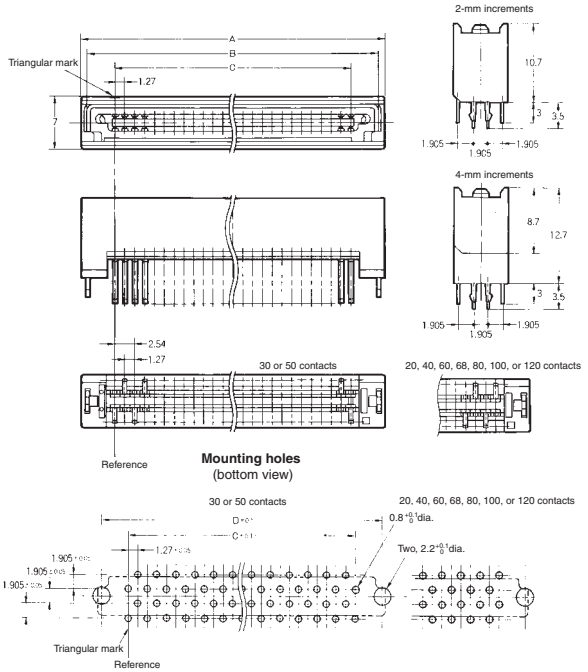
**XH3A Plug, Straight DIP
Terminals.
Stacking Space
Adjustable in Increments
of 2 or 4 mm**



■ Dimensions

XH3A-□□41
(Straight DIP Terminals)

XH3A-□□41-A
(Straight DIP Terminals
with Fastening Pins)



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.7	11.43	18.54
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34
120		83.5	82.2	74.93	82.04

■ Ordering Information

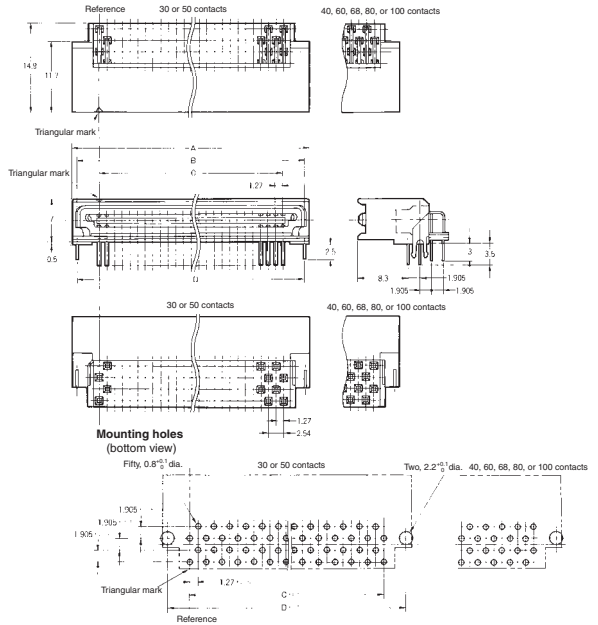
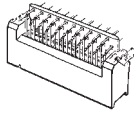
Model	Plug/Straight DIP Terminals with fastening pins (2-mm Increments) (See note.)	Plug/Straight DIP Terminals with fastening pins (4-mm Increments) (See note.)
No. of contacts		
20	XH3A-2041-2A	XH3A-2041-4A
30	XH3A-3041-2A	XH3A-3041-4A
40	XH3A-4041-2A	XH3A-4041-4A
50	XH3A-5041-2A	XH3A-5041-4A
60	XH3A-6041-2A	XH3A-6041-4A
68	XH3A-6841-2A	XH3A-6841-4A
80	XH3A-8041-2A	XH3A-8041-4A
100	XH3A-0141-2A	XH3A-0141-4A
120	XH3A-0241-2A	XH3A-0241-4A

Note: Applicable board thickness is 1.6 mm.

**XH3A Plug, Right-angle
DIP Terminals.**

■ Dimensions

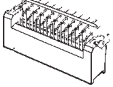
XH3-□□42-A
(Right-angle DIP Terminals
with Fastening Pins)



Dimensions

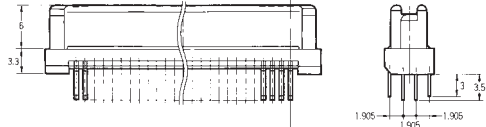
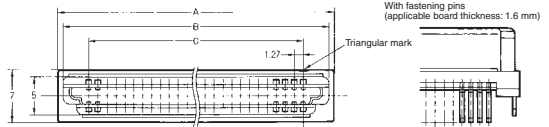
No. of contacts	Dimensions (mm)	A	B	C	D
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34

■ Ordering Information

Model	Plug/Right-angle DIP Terminals with fastening pins (See note.)
No. of contacts	
30	XH3A-3042-A
40	XH3A-4042-A
50	XH3A-5042-A
60	XH3A-6042-A
68	XH3A-6842-A
80	XH3A-8042-A
100	XH3A-0142-A

Note: Applicable board thickness is 1.6 mm.

XH3B Socket, Straight DIP Terminals



■ Dimensions

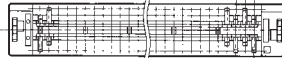
XH3B-□□41
(Straight DIP Terminals)

XH3B-□□41-A
(Straight DIP Terminals with
Fastening Pins)

20, 40, 60, 68, 80, 100, or 120 contacts



30 or 50 contacts



Reference

Mounting holes (bottom view)

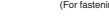
20, 40, 60, 68, 80, 100, or 120 contacts



30 or 50 contacts



Two, 2.2^{±0.05} dia.
(For fastening pin)



0.8^{±0.05} dia.

Triangular mark

Reference

Dimensions

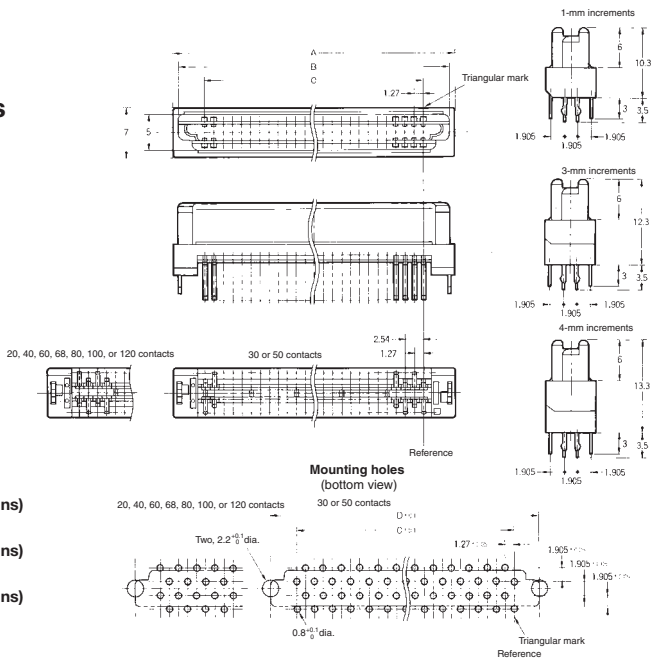
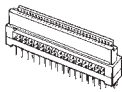
No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

■ Ordering Information

No. of contacts	Model	Socket/Straight DIP Terminals	Socket/Straight DIP Terminals with fastening pins (See note.)
20	XH3B-2041		XH3B-2041-A
30	XH3B-3041		XH3B-3041-A
40	XH3B-4041		XH3B-4041-A
50	XH3B-5041		XH3B-5041-A
60	XH3B-6041		XH3B-6041-A
68	XH3B-6841		XH3B-6841-A
80	XH3B-8041		XH3B-8041-A
100	XH3B-0141		XH3B-0141-A
120	XH3B-0241		XH3B-0241-A

Note: Applicable board thickness is 1.6 mm.

**XH3B Socket, Straight
DIP Terminals.
Stacking Space
Adjustable in Increments
of 1, 3, and 4 mm**



■ Dimensions

XH3B-□□41-1A (1-mm Increment)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-3A (3-mm Increments)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-4A (4-mm Increments)
(Straight DIP Terminals with Fastening Pins)

Dimensions

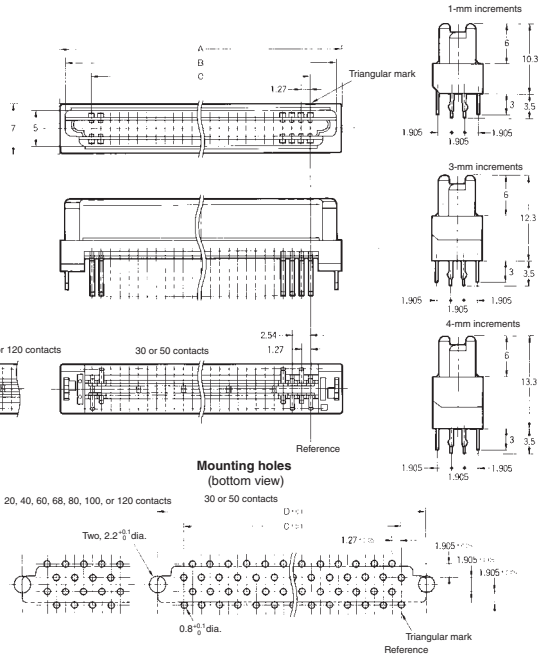
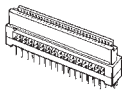
No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

■ Ordering Information

Model	Socket/Straight DIP Terminals with fastening pins (1-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (3-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (4-mm increments) (See note.)
No. of contacts			
20	XH3B-2041-1A	XH3B-2041-3A	XH3B-2041-4A
30	XH3B-3041-1A	XH3B-3041-3A	XH3B-3041-4A
40	XH3B-4041-1A	XH3B-4041-3A	XH3B-4041-4A
50	XH3B-5041-1A	XH3B-5041-3A	XH3B-5041-4A
60	XH3B-6041-1A	XH3B-6041-3A	XH3B-6041-4A
68	XH3B-6841-1A	XH3B-6841-3A	XH3B-6841-4A
80	XH3B-8041-1A	XH3B-8041-3A	XH3B-8041-4A
100	XH3B-0141-1A	XH3B-0141-3A	XH3B-0141-4A
120	XH3B-0241-1A	XH3B-0241-3A	XH3B-0241-4A

Note: Applicable board thickness is 1.6 mm.

**XH3B Socket, Straight
DIP Terminals.
Stacking Space
Adjustable in Increments
of 1, 3, and 4 mm**



■ Dimensions

XH3B-□□41-1A (1-mm Increment)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-3A (3-mm Increments)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-4A (4-mm Increments)
(Straight DIP Terminals with Fastening Pins)

Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

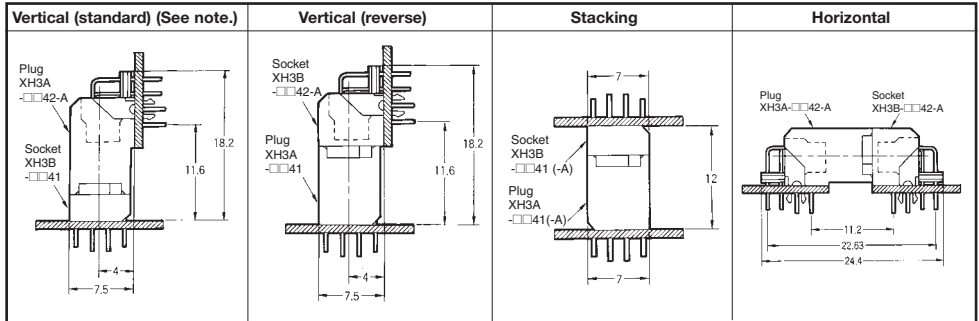
■ Ordering Information

Model	Socket/Straight DIP Terminals with fastening pins (1-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (3-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (4-mm increments) (See note.)
20	XH3B-2041-1A	XH3B-2041-3A	XH3B-2041-4A
30	XH3B-3041-1A	XH3B-3041-3A	XH3B-3041-4A
40	XH3B-4041-1A	XH3B-4041-3A	XH3B-4041-4A
50	XH3B-5041-1A	XH3B-5041-3A	XH3B-5041-4A
60	XH3B-6041-1A	XH3B-6041-3A	XH3B-6041-4A
68	XH3B-6841-1A	XH3B-6841-3A	XH3B-6841-4A
80	XH3B-8041-1A	XH3B-8041-3A	XH3B-8041-4A
100	XH3B-0141-1A	XH3B-0141-3A	XH3B-0141-4A
120	XH3B-0241-1A	XH3B-0241-3A	XH3B-0241-4A

Note: Applicable board thickness is 1.6 mm.

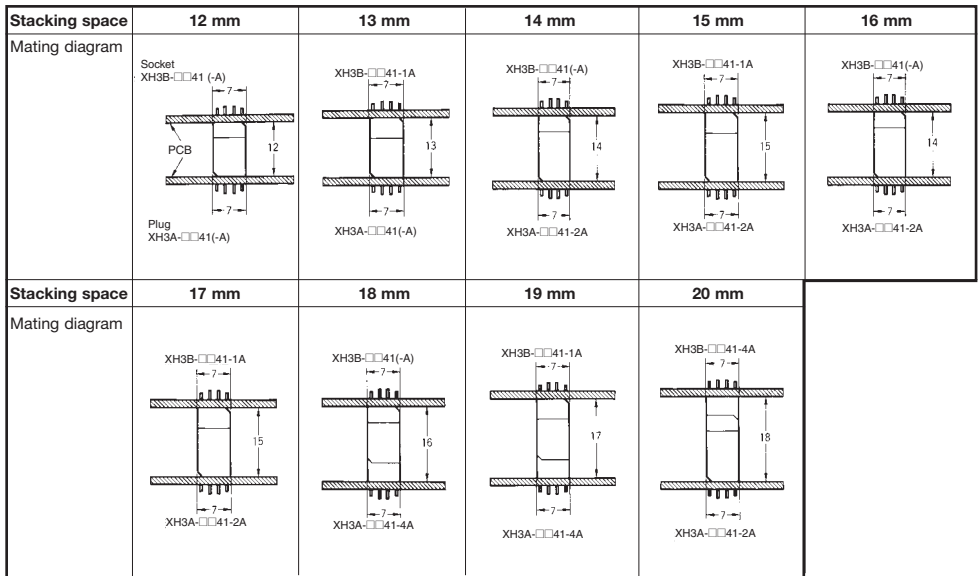
■ Mating Diagram

Vertical/Horizontal/Stacking



Note: The function of the standard and reverse models is the same as that of the standard XC5 DIN Connectors.

Stacking Space Adjustable Models

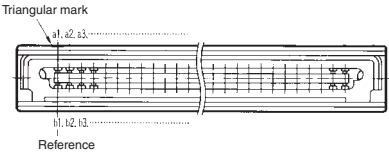
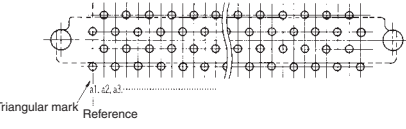
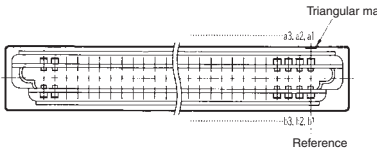
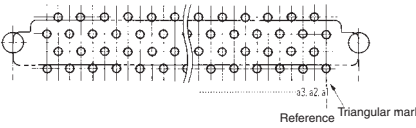


Combinations

Plug	Socket	XH3B-□□41 XH3B-□□41-A	1-mm increment XH3B-□□41-1A	3-mm increments XH3B-□□41-3A	4-mm increments XH3B-□□41-4A
XH3A-□□41, XH3A-□□1-A		12 mm	13 mm	(15 mm) (See note.)	(16 mm) (See note.)
2-mm increment XH3A-□□41-2A		14 mm	15 mm	(17 mm) (See note.)	18 mm
4-mm increment XH3A-□□41-4A		16 mm	17 mm	19 mm	20 mm

Note: Combinations marked with parentheses must be avoided if possible.

■ Contact Numbers

Item Model	Mated diagram	Mounting holes (bottom view)
Plug, Straight Terminals		
Socket, Straight Terminals		

- Contact numbers are not printed on the connectors. Use the triangular mark (▼) as a guide when designing and mounting to boards.
- On the mating side, the row of terminals on the triangular mark side are called row a, and the row on the other side is called row b. The numbers are in the order shown.
- The triangular marks on the plug and socket must be aligned when mated. The contact numbers on both sides must match.

■ Precautions

Correct Use

Mating Compatibility

XH3 Half-pitch Connectors do not mate with XH2 or XH4 Half-pitch Connectors.

Special Finish for Preventing Flux Rise

XH3 Connectors (i.e., Straight Terminals and standard size, 1-, and 2-mm increments) have a special finish that prevents flux rise. (The Connectors are designed for automated soldering. Brush coating flux from the back of the board applies too much flux and may nullify the special finish. Never use this method to apply flux.)

Soldering

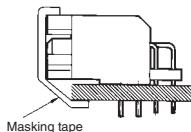
Automated soldering

Use tape to mask the Right-angle Terminal Connector prior to automated soldering.

Automated Soldering Conditions

(Jet Flow)

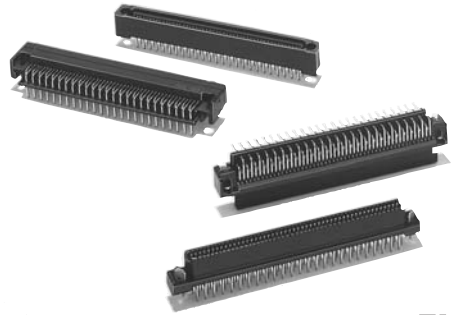
1. Soldering temperature: 250±5°C
2. Continuous soldering time: Within 5 s (Be sure to wash the board after continuous soldering is completed.)



ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.
To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Allows High-density Mounting for Electronic Devices. A Half-Pitch Connector with a 1.27-mm Pitch for Compactness.

- A pitch of 1.27 mm for high-density mounting of double-row arrangements.
- A quadruple-row staggered arrangement (1.27 mm x 1.905 mm) for board connection.
- Leaf contact construction enables smooth mating and resistance to bending.
- Space saving mating length of 3.1 mm.
- Press fitting assures long-term contact quality. The gold/palladium plating has been improved for better contact reliability.
- A special finish improves flux resistance (Straight Terminals only). Also it has fastening pins to standardize all the contacts.
- Can be mounted to boards with screws.
- The XH2 conforms to EN, IEC, UL (file no. E103202), and CSA (file no. LR62678).
- Not mated with XH3 and XH4 Half-pitch Connectors.



Specifications

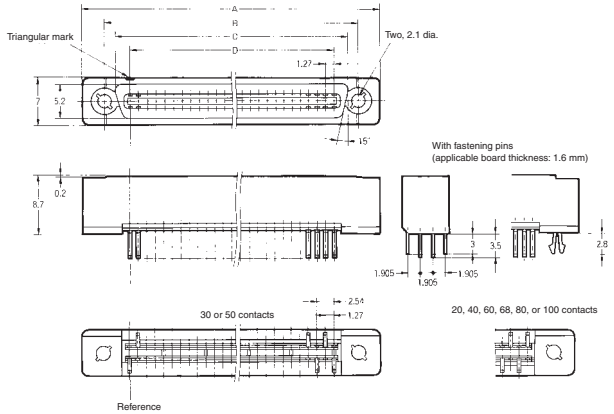
Rated current	0.5 A
Rated voltage	125 VAC
Contact resistance (See note.)	30 mΩ max. (at 20 mV max., 100 mA max.)
Insulation resistance	1000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min (leakage current: 1 mA max.)
Overall insertion force	0.78 N max. per contact
Overall removal force	0.10 N min. per contact
Insertion tolerance	400 times
Ambient temperature	Operating: -55 to 105°C (with no icing)

Note: The contact resistance depends on which XH2A-□□42 combined with the XH2B-□□41.

Materials and Finish

Item		Type	Plug	Socket
Housing			PBT resin with glass (UL94V-0)/black	
Locator			PBT resin with glass (UL94V-0)/black	
Contacts	Mating end		Phosphor bronze/nickel base, gold/palladium plating	Phosphor bronze/nickel base, gold/palladium plating
	Terminal		Phosphor bronze/nickel base, gold flash plating	Phosphor bronze/nickel base, gold flash plating
Fastening pins			Phosphor bronze/tin plating	

XH2A Plug, Straight DIP Terminals

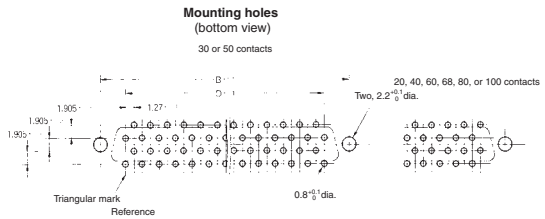
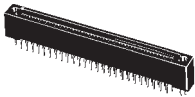


■ Dimensions

XH2A-□□41 (Straight DIP Terminals)



XH2A-□□41-A (Straight DIP Terminals with Fastening Pins)



Dimensions

No. of contacts	Dimensions (mm)	Dimensions (mm)			
		A	B	C	D
20		25.4	19.05	15.8	11.43
30		31.8	25.40	22.2	17.78
40		38.1	31.75	28.5	24.13
50		44.5	38.10	34.9	30.48
60		50.8	44.45	41.2	36.83
68		55.9	49.53	46.3	41.91
80		63.5	57.15	53.9	49.53
100		76.2	69.85	66.6	62.23

■ Ordering Information

No. of contacts	Model	Plug/Straight DIP Terminals	Plug/Straight DIP Terminals with fastening pins (See note.)
20			
20	XH2A-2041		XH2A-2041-A
30	XH2A-3041		XH2A-3041-A
40	XH2A-4041		XH2A-4041-A
50	XH2A-5041		XH2A-5041-A
60	XH2A-6041		XH2A-6041-A
68	XH2A-6841		XH2A-6841-A
80	XH2A-8041		XH2A-8041-A
100	XH2A-0141		XH2A-0141-A

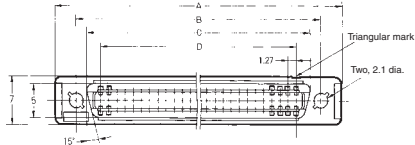
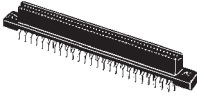
Note: Applicable board thickness is 1.6 mm.

Half-pitch Board-to-Board Connectors - XH2

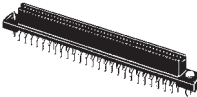
XH2B Socket, Straight DIP Terminals

■ Dimensions

XH2B-□□41 (Straight DIP Terminals)



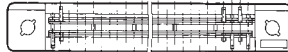
XH2B-□□41-A (Straight DIP Terminals with Fastening Pins)



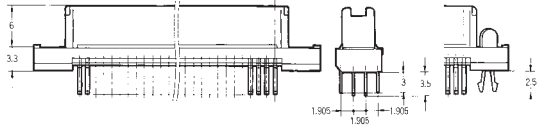
20, 40, 60, 68, 80, or 100 contacts



30 or 50 contacts

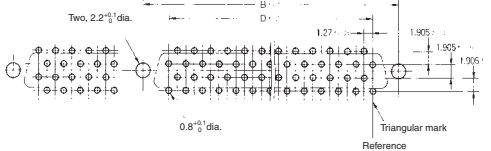


With fastening pins
(applicable board thickness: 1.6 mm)



Mounting holes
(bottom view)

20, 40, 60, 68, 80, or 100 contacts



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		25.4	19.05	15.7	11.43
30		31.8	25.40	22.1	17.78
40		38.1	31.75	28.4	24.13
50		44.5	38.10	34.8	30.48
60		50.8	44.45	41.1	36.83
68		55.9	49.53	46.2	41.91
80		63.5	57.15	53.8	49.53
100		76.2	69.85	66.5	62.23

■ Ordering Information

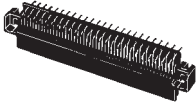
Model	Socket/Straight DIP Terminals	Socket/Straight DIP Terminals with fastening pins (See note.)
No. of contacts		
20	XH2B-2041	XH2B-2041-A
30	XH2B-3041	XH2B-3041-A
40	XH2B-4041	XH2B-4041-A
50	XH2B-5041	XH2B-5041-A
60	XH2B-6041	XH2B-6041-A
68	XH2B-6841	XH2B-6841-A
80	XH2B-8041	XH2B-8041-A
100	XH2B-0141	XH2B-0141-A

Note: Applicable board thickness is 1.6 mm.

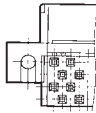
XH2B Socket, Right-angle DIP Terminals

■ Dimensions

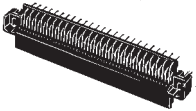
XH2B-□□42 (Right-angle DIP Terminals)



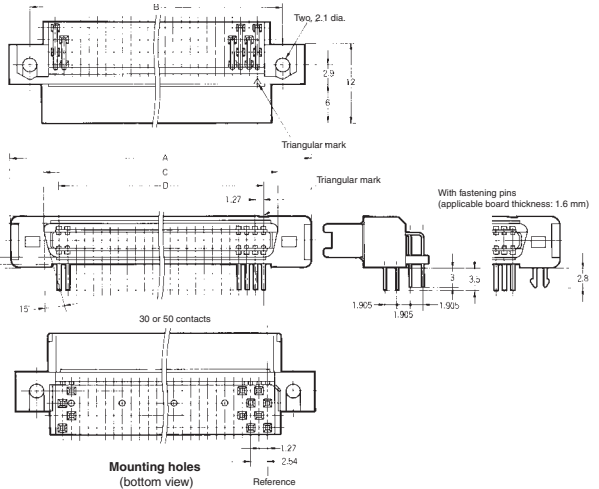
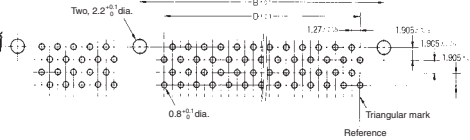
20, 40, 60, 68, 80, or 100 contacts



XH2B-□□42-A (Right-angle DIP Terminals with Fastening Pins)



20, 40, 60, 68, 80, or 100 contacts



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		25.4	19.05	15.7	11.43
30		31.8	25.40	22.1	17.78
40		38.1	31.75	28.4	24.13
50		44.5	38.10	34.8	30.48
60		50.8	44.45	41.1	36.83
68		55.9	49.53	46.2	41.91
80		63.5	57.15	53.8	49.53
100		76.2	69.85	66.5	62.23

■ Ordering Information

Model	Socket/Right-angle DIP Terminals	Socket/Right-angle DIP Terminals with fastening pins (See note.)
No. of contacts		
20	XH2B-2042	XH2B-2042-A
30	XH2B-3042	XH2B-3042-A
40	XH2B-4042	XH2B-4042-A
50	XH2B-5042	XH2B-5042-A
60	XH2B-6042	XH2B-6042-A
68	XH2B-6842	XH2B-6842-A
80	XH2B-8042	XH2B-8042-A
100	XH2B-0142	XH2B-0142-A

Note: Applicable board thickness is 1.6 mm.

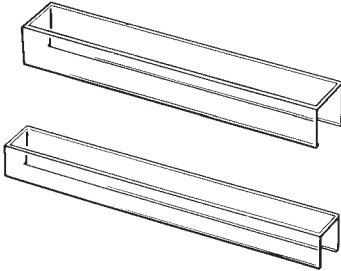
Half-pitch Board-to-Board Connectors - XH2

■ Accessories (Sold Separately)

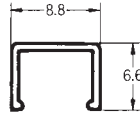
Dust Cover (Polyvinylchloride)

XH2T-□□01 (for Plug)

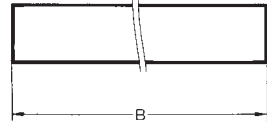
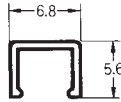
XH2T-□□02 (for Socket)



XH2T-□□01 (Transparent for Plug)



XH2T-□□02 (Blue for Socket)



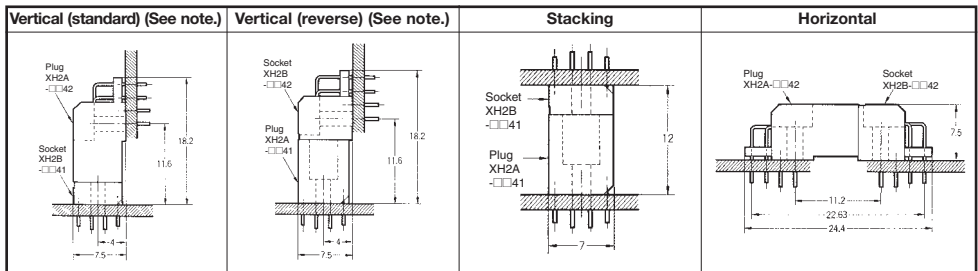
Attach these Dust Covers to Connectors that are not in use. They do not protect the Connectors from flux during automated soldering.

■ Ordering Information

No. of contacts	XH2A (for Plug)		XH2B (for Socket)		Minimum order
	Model	Dimensions A (mm)	Model	Dimensions B (mm)	
20	XH2T-2001	25	XH2T-2002	15	100
30	XH2T-3001	31	XH2T-3002	21	
40	XH2T-4001	37	XH2T-4002	27	
50	XH2T-5001	44	XH2T-5002	34	
60	XH2T-6001	50	XH2T-6002	40	
68	XH2T-6801	55	XH2T-6802	45	
80	XH2T-8001	63	XH2T-8002	53	
100	XH2T-0101	75	XH2T-0102	65	

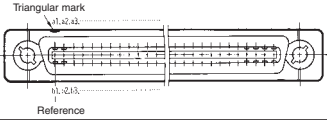
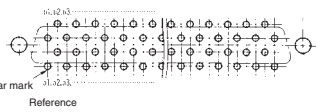
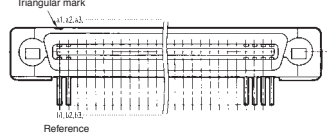
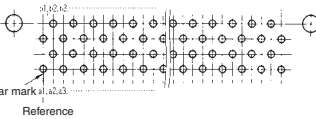
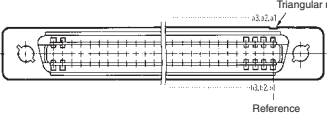
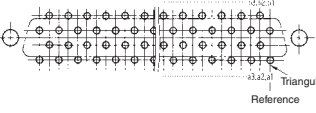
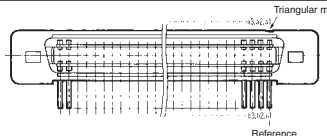
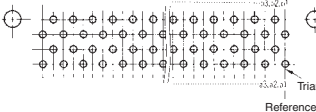
Note: Order the following models in multiples of the minimum order.

■ Mating Diagram (Vertical/Horizontal/Stacking)



Note: The function of the standard and reverse models is the same as that of the standard XC5 DIN Connector.

■ Contact Numbers

Item Model	Mated diagram	Mounting holes (bottom views)
Plug, Straight Terminals		
Plug, Right-angle Terminals		
Socket, Straight Terminals		
Socket, Right-angle Terminals		

- Contact numbers are not printed on the connectors. Use the triangular mark (▼) as a guide when designing and mounting to boards.
- On the mating side, the row of terminals on the triangular mark side are called row a, and the row on the other side is called row b. The numbers are in the order shown.
- The triangular marks on the plug and socket must be aligned when mated. The contact numbers on both sides must match.

■ Precautions

Correct Use

Mating Compatibility

XH2 Half-pitch Connectors do not mate with XH3 or XH4 Half-pitch Connectors.

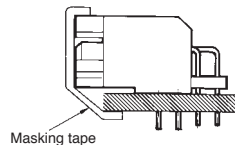
Special Finish for Preventing Flux Rise

XH2 Connectors (i.e., Straight Terminals) have a special finish that prevents flux rise. (The Connectors are designed for automated soldering. Brush coating flux from the back of the board applies too much flux and may nullify the special finish. Never use this method to apply flux.)

Soldering

Automated soldering

Use tape to mask the Right-angle Terminal Connector prior to automated soldering.



Automated Soldering Conditions (Jet Flow)

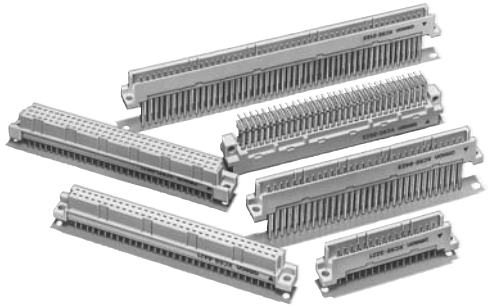
Soldering temperature: 250±5°C

Continuous soldering time: Within 5 s (Be sure to wash the board after automated soldering is completed.)

A Wide Variety of DIN Connectors That Conform to UL/CSA Standards.

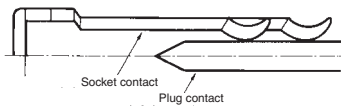


- Fully preserve the characteristics of normal DIN connectors while increasing the number of terminals available. (DIN-style mates with DIN)
- A wide product range to fit almost any application.
- Meeting world market needs with products ranging from one-piece connectors (card edge) to two-piece connectors.
- Use the twin-contact system for high reliability and low cost.
- Lower insertion force as a result of FEM analysis techniques.
- Mates with OMRON's XC2- and XC6-series connectors.
- Conform to UL standards (file no. E 103202) and CSA standards (file no. LR 62678).
- Mounting dimensions of DIN style-1 connectors are same as DIN connector (style-2 have widened dimensions for ease of mounting).
- Solderless fine-fit connector with W-shaped pins available (contact OMRON).

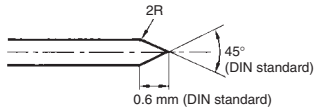


■ Structure

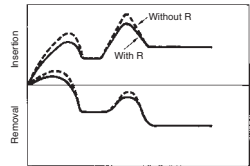
Twin Contacts (2-point Contact System)



■ Low Insertion Force Design



The shape of the Plug contact tip is based on the DIN standard dimensions, however, a small radius, R, has been introduced between the shaft and the tip. This results in less force being required for insertion.



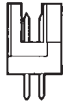



■ Comparison of Standard DIN and DIN-style Connectors

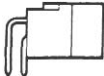


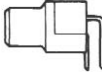

	Board mounting	Mounting hole dimensions	Characteristics	Differences
Standard DIN	 Stabilized by board edge	 Standard length	<ul style="list-style-type: none"> • Good for 19-inch racks 	<ul style="list-style-type: none"> • Plug contacts plated on both sides. • With flanges at the rear on the Socket side. • With Coding Key
DIN style 1	 Sits on top of the board	 Standard length	<ul style="list-style-type: none"> • Board-top mounting facilitates automated soldering. • Modified DIN B- and C-type Connectors 	<ul style="list-style-type: none"> • Plug contacts plated on one side (only on the mating end) • No flange at the rear on the Socket side.
DIN style 2	 Sits on top of the board	 $l_1 = \text{standard length} + 3.98 \text{ mm (XC5E)}$ $l_1 = \text{standard length} + 5.08 \text{ mm (XC5F)}$	<ul style="list-style-type: none"> • With wider mounting dimensions than style 1. • Modified DIN Q-type Connectors 	<ul style="list-style-type: none"> • No Coding Key • All other specifications are identical to those of standard DIN Connectors.

■ Connectors

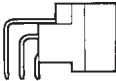


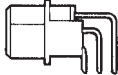
Double-row Connectors - DIN

Model	XC5A B type	XC5B B type	XC5E Q type	XC5F Q type
Appearance	Plug with right-angle terminals 	Socket with straight terminals 	Plug with straight terminals 	Socket with right-angle terminals 

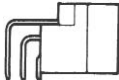

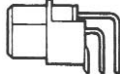
Double-row Connectors - DIN-style

Model	XC5A DIN style 1	XC5B DIN-style compatible	XC5E DIN style 2	XC5F DIN style 2	XC5K DIN style 2
Appearance	Plug right-angle terminals 	Socket straight terminals 	Plug straight terminals 	Socket right-angle terminals 	Plug large stacking straight terminals 

Triple-row Connectors - DIN

Model	XC5C C type	XC5D C type	XC5G R type	XC5H R type
Appearance	Plug with right-angle terminals 	Socket with straight terminals 	Plug with straight terminals 	Socket with right-angle terminals 

Triple-row Connectors - DIN style

Model	XC5C DIN style 1	XC5D DIN-style compatible	XC5H DIN style 2
Appearance	Plug right-angle terminals 	Socket straight terminals 	Socket right-angle terminals 

■ Ratings and Characteristics

Rated current	2 A
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	10 ⁹ MΩ min. (at 100 VDC)
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)
Connector insertion	0.59 N max. per contact
Connector removal	0.15 N min. (with test gauge, t = 0.56 mm)
Insertion tolerance	200 times (50 times for DIN-style)
Ambient temperature	Operating: -55 to 125°C (with no icing)

■ Materials and Finish

Item		Plugs	Sockets
Housings		Fiber-glass reinforced PBT resin (UL94V-0)/gray	
Contacts	Mating end	Brass/nickel base, 0.4-mm gold plating (See note 1.)	Phosphor bronze/nickel base, 0.4-mm gold plating (See note 1.)
	Terminal	Brass/nickel base, tin plating	Phosphor bronze/nickel base, tin plating

Note: 1. For non-standard plating specifications, contact your OMRON representative.
 2. Wrap terminal contacts are made from phosphor bronze.

■ Applicable Wrap Post Wire Sizes

AWG30, AWG28, AWG26, or AWG24
 (Solid wire: 0.25 to 0.51 mm dia.)

■ Wrap Post Length

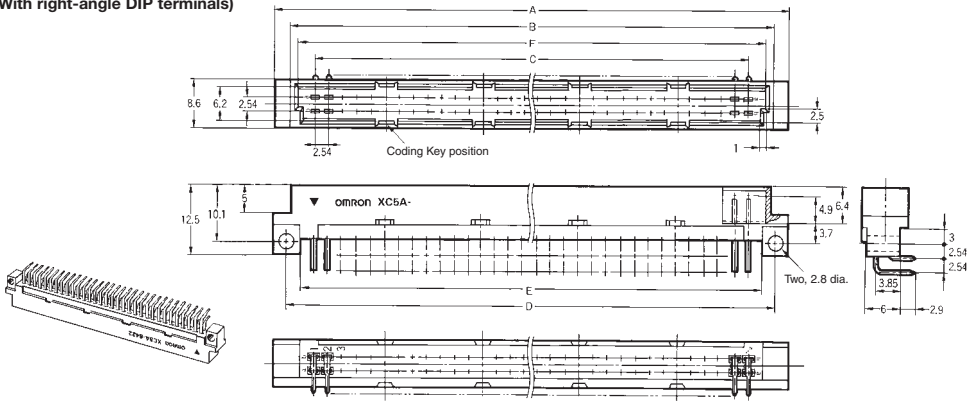
3 wires

XC5A Double-row Plugs, DIN B-type (Standard)

■ Dimensions

XC5A-□□22

(With right-angle DIP terminals)

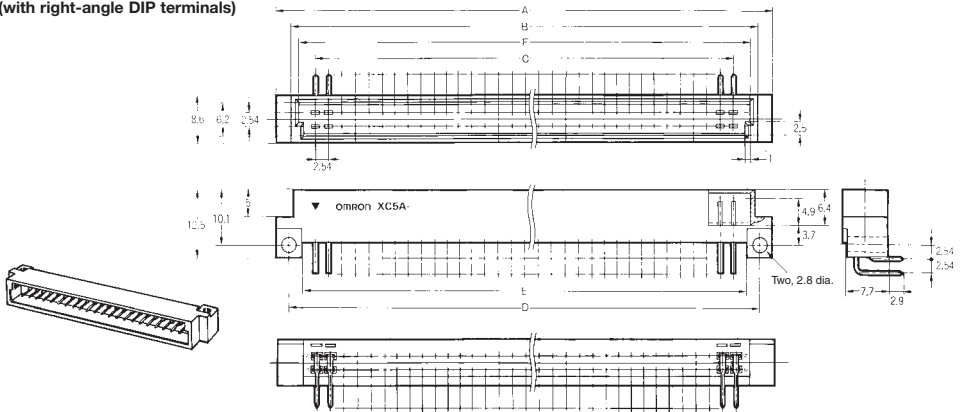


XC5A Double-row Plugs, DIN-Style 1 (with right-angle DIP terminals)

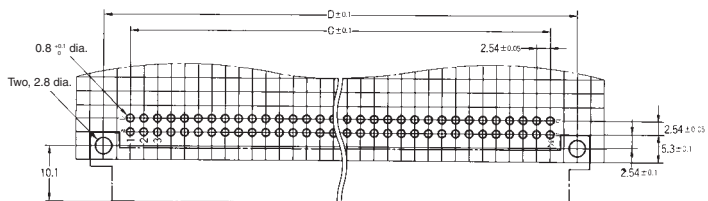
XC5A Double-Row Plugs, DIN-style 1

XC5A-□□82-1

(with right-angle DIP terminals)



Mounting holes (bottom view)



XC5A Double-row Plugs, DIN B-type (Standard)/DIN Style

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key positions (contact No. For DIN*)
		A	B	C	D	E	F	
DIN/DIN Style	20	37.9	32.1	22.86	33.02	28.1	29.3	3, 8
DIN/DIN Style	24	43.0	37.2	27.94	38.10	33.1	34.4	-
DIN/DIN Style	30	50.6	44.8	35.56	45.72	40.8	42.0	-
DIN/DIN Style	32	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN/DIN Style	44	68.4	62.6	53.34	63.50	58.5	59.8	4, 9, 14, 19
DIN/DIN Style	50	76.0	70.2	60.96	71.12	66.2	67.4	5, 10, 16, 21
DIN/DIN Style	64	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27
DIN/DIN Style	100	139.5	133.7	124.46	134.62	129.7	130.9	10, 20, 31, 41

*DIN-style connectors cannot be coded - There is no coding key available for them.

■ Ordering Information

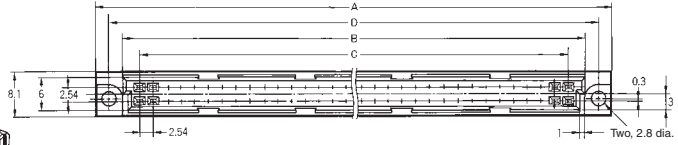
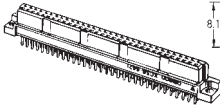
No. of contacts	Terminal type	DIN Model	DIN-style Model
20*	Right-angle DIP terminals	XC5A-2022	XC5A-2082-1
24		-	XC5A-2482-1
30		-	XC5A-3082-1
32		XC5A-3222	XC5A-3282-1
44*		XC5A-4422	XC5A-4482-1
50*		XC5A-5022	XC5A-5082-1
64		XC5A-6422	XC5A-6482-1
100*		XC5A-0122	XC5A-0182-1

*Marked items have an increased number of contacts while following DIN standards.

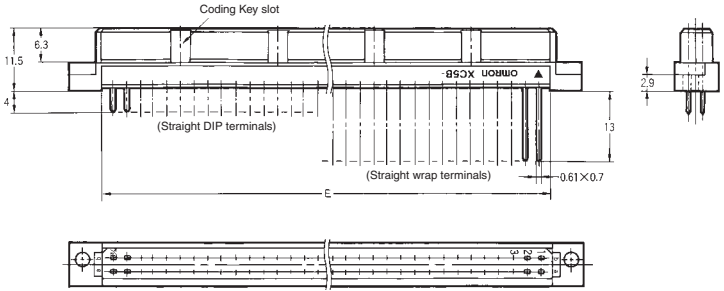
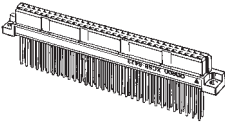
XC5B Double-row Sockets, DIN B-type (Standard)

■ Dimensions

XC5B-□□21
(With straight DIP terminals)

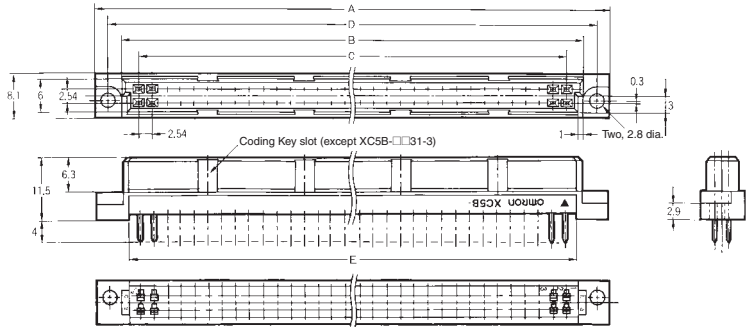
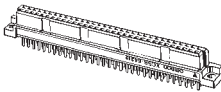


XC5A-□□23-1
(With Straight Wrap terminals)

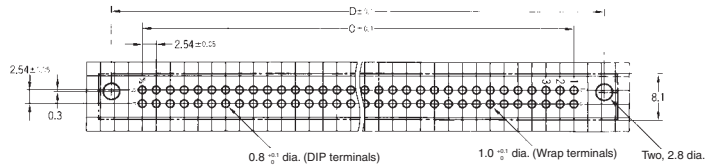


XC5B Double-row sockets, DIN style compatible

XC5B-□□31-0
XC5B-□□31-3
(With straight DIP terminals)



Mounting holes (bottom view)



XC5A Double-row Sockets, DIN B-type (Standard)/DIN Style

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key slot positions (contact No.)
		A	B	C	D	E	
DIN/DIN Style	10	26.2	16.4	10.16	21.42	14.4	-
DIN/DIN Style	14	31.3	21.5	15.24	26.50	19.4	-
DIN/DIN Style	16	33.8	24.0	17.78	29.04	22.0	-
DIN/DIN Style	20	38.9	29.1	22.86	34.12	27.1	3,8
DIN/DIN Style	24	44.0	34.2	22.94	39.20	32.1	-
DIN/DIN Style	30	51.6	41.8	35.56	46.82	39.8	-
DIN/DIN Style	32	54.2	44.4	38.10	49.36	42.3	5,12
DIN/DIN Style	44	69.4	59.6	53.34	64.60	57.5	4,9,14,19
DIN/DIN Style	50	77.0	67.2	60.96	72.22	65.2	5,10,16,21
DIN/DIN Style	64	94.8	85.0	78.74	90.0	82.9	6,13,20,27
DIN/DIN Style	80	115.1	105.3	99.06	110.32	103.3	-
DIN/DIN Style	100	140.5	130.7	124.46	135.72	128.7	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

■ Ordering Information

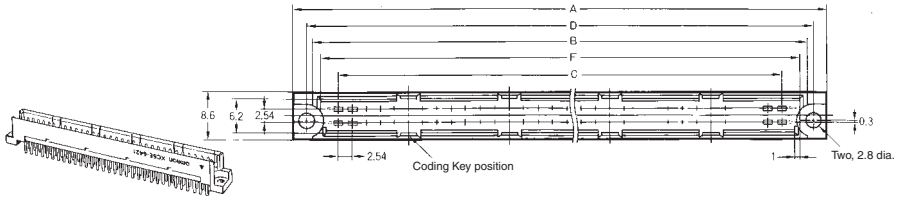
No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
10		XC5B -1031-3	
14		XC5B -1431-3	
16		XC5B -1631 -3	
20	XC5B-2021	XC5B -2031-3	XC5B-2023
24		XC5B -2431-3	
30		XC5B -3031-3	
32	XC5B-3221	XC5B-3231-3	XC5B-3223
44	XC5B-4421	XC5B-4431-3	XC5B-4423
50	XC5B-5021	XC5B-5031-3	XC5B-5023
64	XC5B-5421	XC5B-6431-3	XC5B-6423
80		XC5B-8031-3	
100	XC5B-0121	XC5B-0131-3	XC5B-0123

XC5E Double-row Plugs, DIN Q-type (Reverse)

■ Dimensions

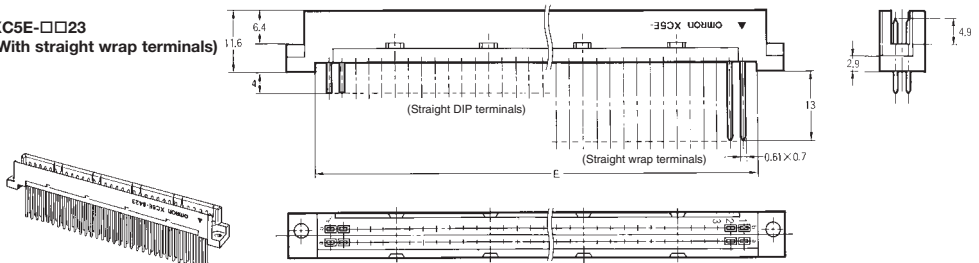
XC5E-□□21

(With straight DIP terminals)



XC5E-□□23

(With straight wrap terminals)

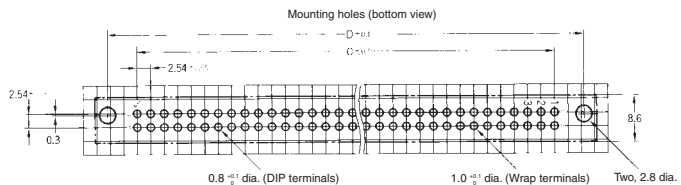
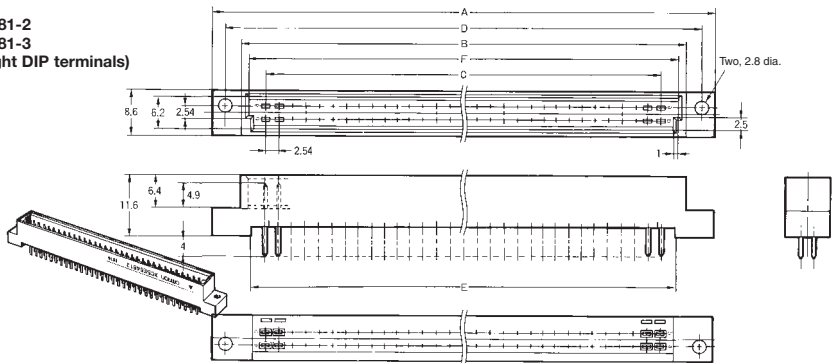


XC5E Double-row Plugs, DIN Style 2

XC5E-□□-81-2

XC5E-□□-81-3

(With straight DIP terminals)



Note: Dimensions are given for XC5E-□□-81-2. The dimension and shape of the XC5E-□□-81-3 are different contact OMRON for further information.

XC5A Double-row Plugs, DIN Q-type (Reverse/DIN Style 2)

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key slot positions (contact No.)
		A	B	C	D	E	F	
DIN/DIN Style	10 **	26.2	19.4	10.16	21.42	15.4	16.6	-
DIN/DIN Style	14 **	31.3	24.5	15.24	26.50	20.4	21.7	-
DIN/DIN Style	20	38.9	32.1	22.86	34.12	28.1	29.3	3,8
DIN/DIN Style	24 **	44.0	37.2	27.94	39.20	33.1	34.4	-
DIN/DIN Style	30 **	55.7	44.8	35.56	50.80	40.8	42.0	-
DIN/DIN Style	32	54.2	47.4	38.10	49.36	43.3	44.6	5,12
DIN/DIN Style	44	69.4	62.6	53.34	64.60	58.5	59.8	4,9,14,19
DIN/DIN Style	50	77.0	70.2	60.96	72.22	66.2	67.4	5,10,16,21
DIN/DIN Style	64	94.8	88.0	78.74	90.00	83.9	85.2	6,13,20,27
DIN/DIN Style	100	140.5	133.7	124.46	135.72	129.71	30.9	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

■ Ordering Information

No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
10		XC5E -1081-3	
14		XC5B -1481-3	
20*	XC5E-2021	XC5E -2081-2	XC5E-2023
24		XC5E -2481-3	
30		XC5E -3081-2	
32	XC5E-3221	XC5E-3281-2	XC5E-3223
44*	XC5E-4421	XC5E-4481-2	XC5E-4423
50*	XC5E-5021	XC5E-5081-2	XC5E-5023
64	XC5E-6421	XC5E-6481-2	XC5E-6423
100*	XC5E-0121	XC5B-0181-2	XC5E-0123

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

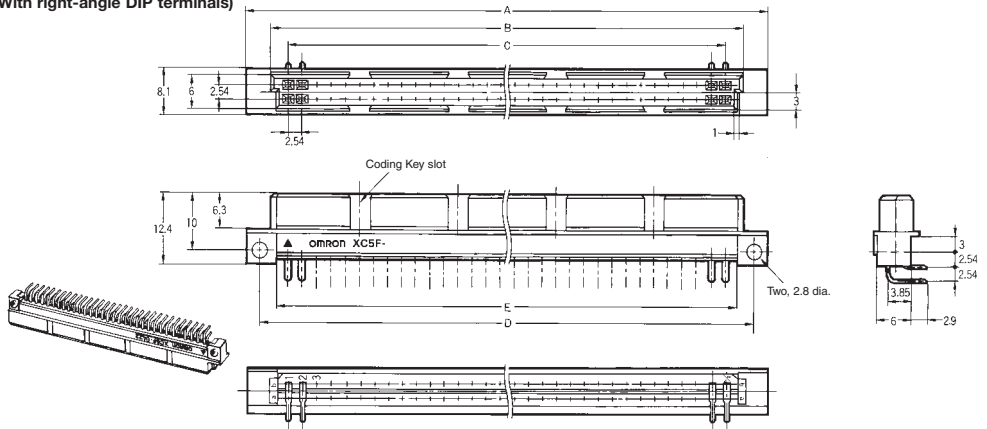
*Marked items have an increased number of contacts whilst following DIN standards.

XC5F Double-row Sockets, DIN Q-type (Reverse)

■ Dimensions

XC5F-□□22

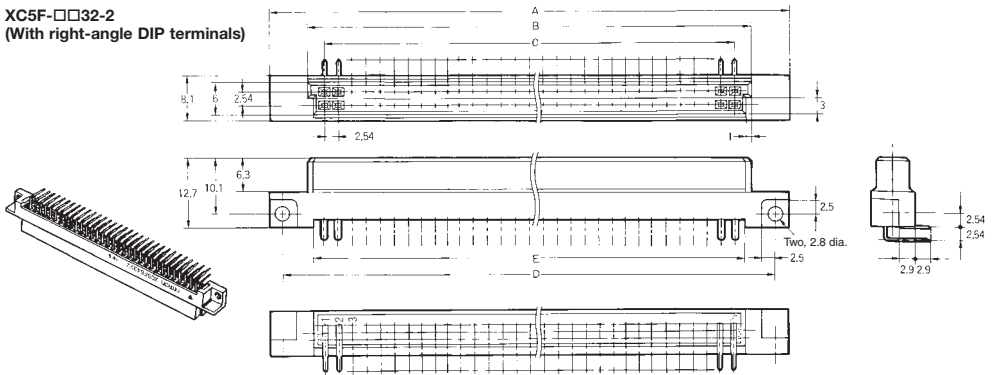
(With right-angle DIP terminals)



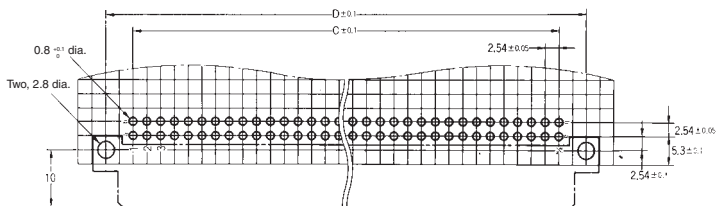
XC5F Double-row Sockets, DIN Style 2

XC5F-□□32-2

(With right-angle DIP terminals)



Mounting holes (bottom view)



XC5F Double-row Sockets, DIN Q-type (Reverse)/DIN Style 2

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key slot positions (contact No.)
		A	B	C	D	E	
DIN/DIN Style	20	37.9	29.1	22.86	33.02	27.1	3,8
DIN/DIN Style	30	55.7	41.8	35.56	50.80	39.7	-
DIN/DIN Style	32	53.2	44.4	38.10	48.26	42.3	5,12
DIN/DIN Style	44	68.4	59.6	53.34	63.5	57.5	4,9,14,19
DIN/DIN Style	50	76.0	67.2	60.96	71.12	65.2	5,10,16,21
DIN/DIN Style	64	93.8	85.0	78.74	88.90	82.9	6,13,20,27
DIN/DIN Style	100	139.5	130.7	124.46	134.62	128.7	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

■ Ordering Information

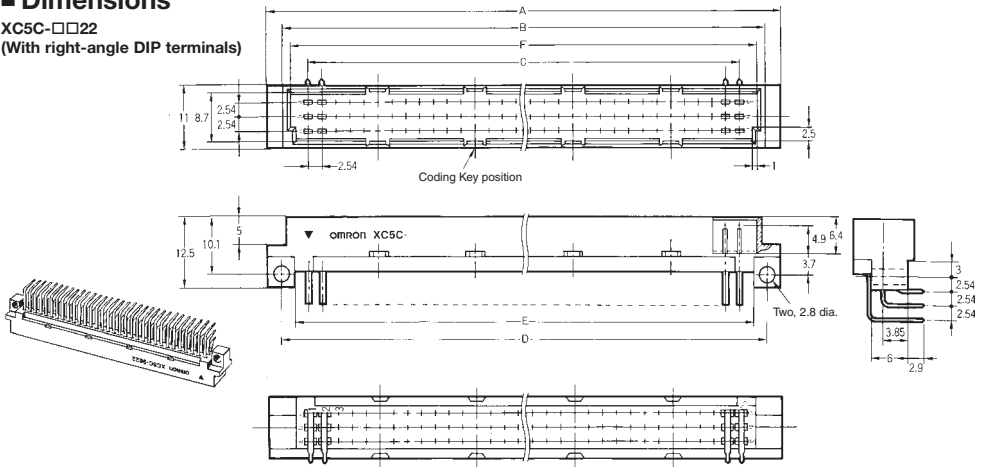
No. of contacts	Terminal type	DIN Model	DIN-style Model
20*	Right-angle DIP Terminals	XC5F-2022	XC5F-2032-2
30			XC5F-3032-2
32		XC5F-3222	XC5F-3232-2
44*		XC5F-4422	XC5F-4432-2
50*		XC5F-5022	XC5F-5032-2
64		XC5F-5422	XC5F-6432-2
100*		XC5F-0122	XC5F-0132-2

*Marked items have an increased number of contacts while following DIN standards.

XC5C Triple-row Plugs, DIN C-type (Standard)

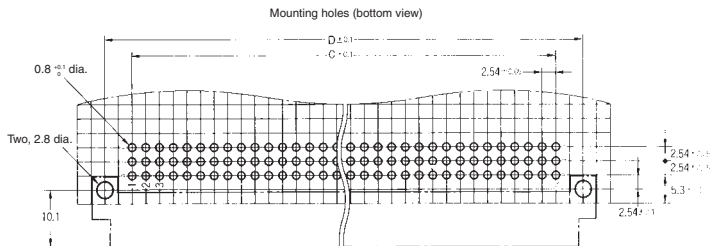
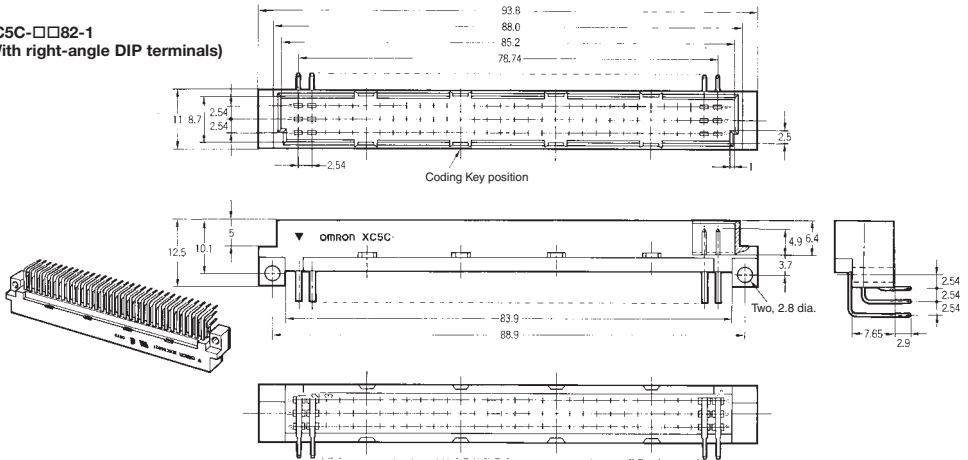
■ Dimensions

XC5C-□□22
(With right-angle DIP terminals)



XC5C Triple-row Plugs, DIN Style 1

XC5C-□□82-1
(With right-angle DIP terminals)



XC5C Triple-row Plugs, DIN C-type (Standard)/DIN Style 1

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key positions (contact No.)
		A	B	C	D	E	F	
DIN	32*	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN	48	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN/DIN Style	64*	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27
DIN/DIN Style	96	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27

*Has no center row (row b).

■ Ordering Information

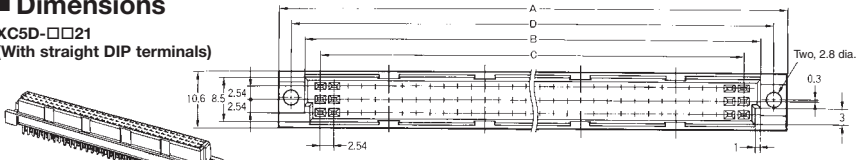
No. of contacts	Terminal type	DIN Model	DIN-style Model
32	Right angle DIP terminals	XC5C-3222	-
48		XC5C-4822	-
64*		XC5C-6422	XC5C-6482-1
96		XC5C-9622	XC5C-9682-1

*Has no center row (row b).

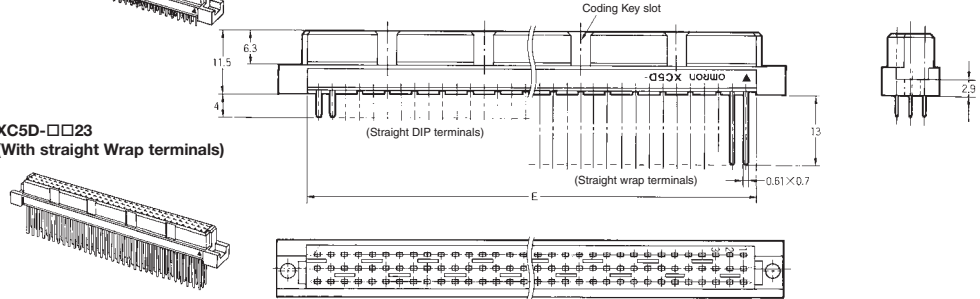
XC5D Triple-row Sockets, DIN C-type (Standard)

■ Dimensions

XC5D-□□21
(With straight DIP terminals)

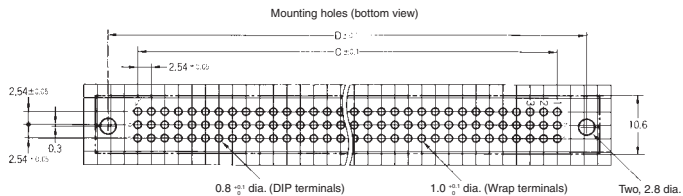
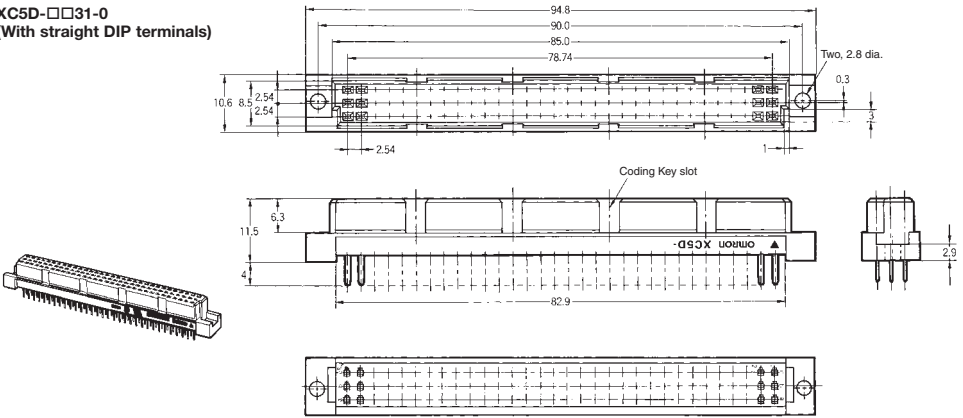


XC5D-□□23
(With straight Wrap terminals)



XC5D Triple-row Sockets, DIN Style compatible

XC5D-□□31-0
(With straight DIP terminals)



XC5D Triple-row Sockets, DIN C-type (Standard)/DIN Style Compatible

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key positions (contact No.)
		A	B	C	D	E	
DIN	32*	54.2	44.4	38.10	49.36	42.3	5, 12
DIN	48	54.2	44.4	38.10	49.36	42.3	5, 12
DIN/DIN Style	64*	94.8	85.0	78.74	90.00	82.9	6, 13, 20, 27
DIN/DIN Style	96	94.8	85.0	78.74	90.00	82.9	6, 13, 20, 27

*Has no center row (row b).

■ Ordering Information

No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
32*	XC5D-3221	-	-
48	XC5D-4821	-	XC5D-4823
64*	XC5D-6421	XC5D-6431-0	XC5D-6423
96	XC5D-9621	XC5D-9631-0	XC5D-9623

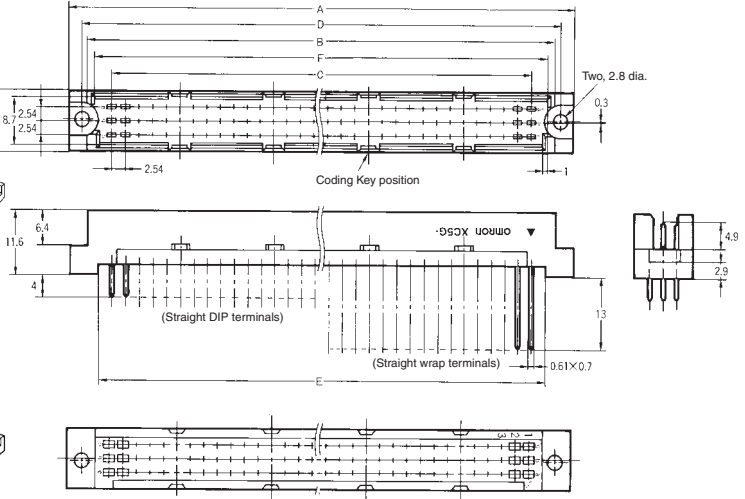
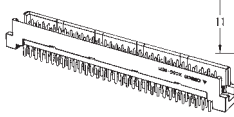
*Has no center row (row b).

XC5G Triple-row Plugs, DIN R-type (Reverse)

■ Dimensions

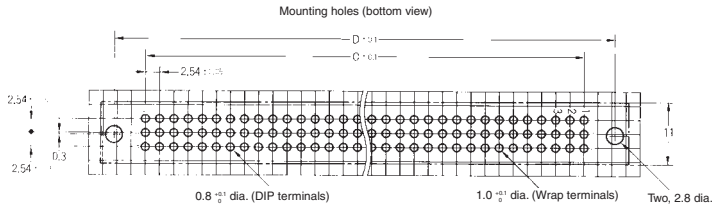
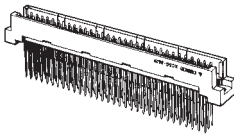
XC5G-□□21

(With straight DIP terminals)



XC5G-□□23

(With straight wrap terminals)



Dimensions

No. of contacts	Dimensions (mm)						Coding Key positions (contact No.)
	A	B	C	D	E	F	
48	54.2	47.4	38.10	49.36	43.3	44.6	5, 12
64*	94.8	88.0	78.74	90.00	83.9	85.2	6, 13, 20, 27
96	94.8	88.0	78.74	90.00	83.9	85.2	6, 13, 20, 27

*Has no centre row (row b).

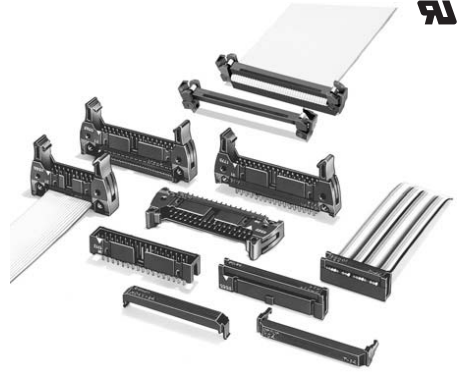
■ Ordering Information

No. of contacts	Terminal type	
	Straight DIP terminals	Straight wrap terminals
48	XC5G-4821	XC5G-4823
64*	XC5G-6421	XC5G-6423
96	XC5G-9621	XC5G-9623

*Has no center row (row b).

The Mainstream of Circuit Board Connectors conforming MIL Standards with Improved Design.

- Our new production system improves reliability.
- Space-saving Box-type Plugs (XG4C) available.
- IDC Plugs (XG4E) can be used for relaying.
- An endless number of combinations can be made using the XG-5 IDC Connectors for discrete wires, XG8 Original Plugs, and the XG2 IDC Connectors for PCBs.
- The Original Plugs (XG8) and the Box-type Plugs (XG4C) can be locked using Lock Levers.
- Conform to MIL standards (MIL-C-83503).
- UL standards (file No. E103202)



Ordering Information

Model	XG4M XG4M-U	XG4M XG4T	XG4A	XG4A	XG4E XG4S	XG4C	XG4H
Appearance	MIL sockets with strain relief (with lock)	MIL sockets with strain relief	MIL plugs	Plugs with dual ports	IDC plugs with strain relief	Box-type plugs	Board-to-board connector sockets

Ratings and Characteristics

Item	MIL Sockets: XG4M Relay Plug: XG4E	MIL Plugs: XG4A Box-type Plugs: XG4C PCB-to-PCB Connectors: XG4H
Rated current	1 A	3 A (See note 1.)
Rated voltage	250 VAC	300 VAC
Contact resistance	20 mW max. (at 20 mV, 100 mA max.)	
Insulation resistance	1,000 MW min. (at 500 VDC)	
Dielectric strength	500 VAC for 1 min (leakage current: 1 mA max.)	
Connector insertion	1.96 N max. per contact	
Contact removal	0.39 N min. (with test gauge, t= 0.64 mm)	
Insertion durability	50 times (See note 2.)	
Ambient temperature	Operating: -55 to 105°C (with no icing)	

Note: 1. The rated current will depend on the Socket you are using. It is 1 A using the XG4M for example.
 2. For standard 0.15-µm gold plating.

Materials and Finish

Item	MIL Plugs: XG4A Box-type Plugs: XG4C	Relay Plugs: XG4E (Strain Relief: XG4S)	MIL Sockets: XG4M (Strain Relief: XG4T)	Board-to-board Connector: XG4H
Housings	Fiber-glass reinforced PBT resin (UL94V-0)/black			
Covers	---	Polyamide resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black	---
Contacts	Mating end Brass/nickel base, 0.15- μ m	Phosphor bronze/nickel base, 0.15- μ m gold plating (See note.) gold plating (See note.)		
	Terminal Press fit	Brass/nickel base, tin plating Phosphor bronze/nickel base, tin plating		
Strain Reliefs	---	Polyamide resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black	---

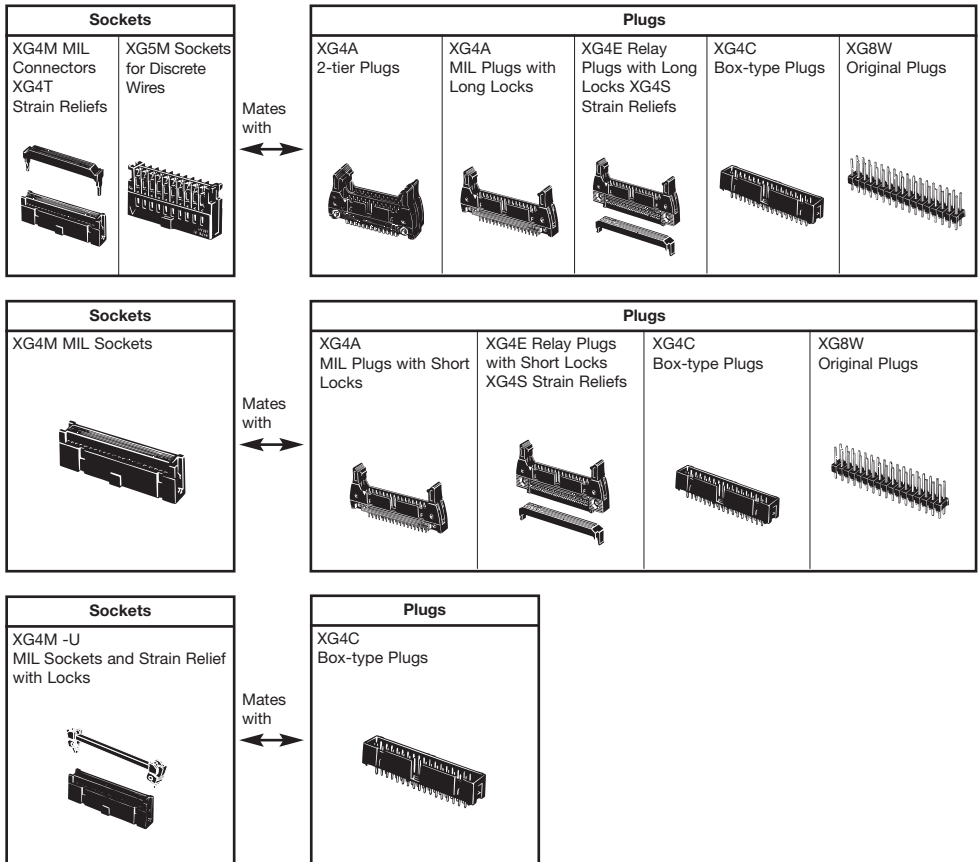
Note: For non-standard plating, contact your OMRON representative.

Applicable Wires

1.27-mm pitch, 7-strand flat cable

- UL2651(standard cable)
- UL20012 (folding cable)
- UL20028 (color-coded cable)

Mating Combinations for XG4 and XG5

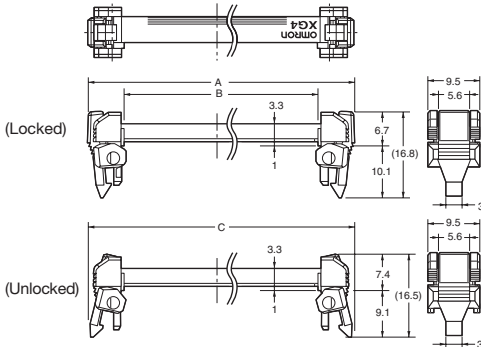


XG4M-U MIL Connectors with Socket Locks

■ Dimensions

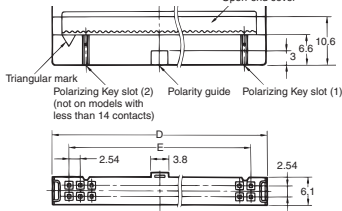
XG4U

Strain Reliefs with Locks



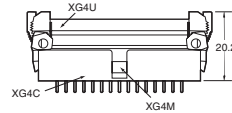
XG4M-□□30 (one polarity guide)

XG4M-□□31 (all others)

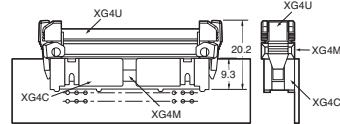


■ Mating diagrams for XG4M

XG4U + XG4M + XG4C (with straight terminals)



XG4U + XG4M + XG4C (with right angle terminals)



Dimensions

No. of contacts	Dimensions (mm)				
	A	B	C	D	E
10	26.8	13.2	26.2	17.3	10.16
14	31.8	18.2	31.2	22.3	15.24
16	34.4	20.8	33.8	24.9	17.78
20	39.5	25.9	38.9	30.0	22.86
26	47.1	33.5	46.5	37.6	30.48
30	52.2	38.6	51.6	42.7	35.56
34	57.2	43.6	56.6	47.7	40.64
40	64.9	51.3	64.3	55.4	48.26
50	77.6	64.0	77.0	68.1	60.96
60	90.3	76.7	89.7	80.8	73.66
64	95.3	81.7	94.7	85.8	78.74

■ Ordering Information

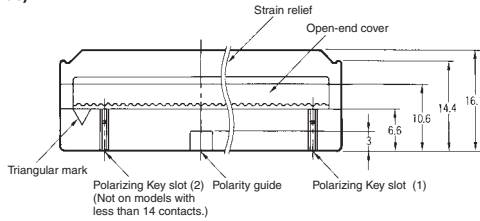
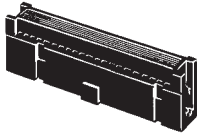
No. of contacts	No. of polarity guides	Socket and Strain Relief Sets (See note 1.)	Socket with Open-end Cover (See note 2.)	Strain Relief with Locks
10	0			XG4U-1004
	1	XG4M-1031-U		
14	0			XG4U-1404
	1	XG4M-1030-U		
16	1	XG4M-1430-U	XG4M-1430	XG4U-1604
20	1	XG4M-1630-U	XG4M-1630	XG4U-2004
26	1	XG4M-2030-U	XG4M-2030	XG4U-2604
30	1	XG4M-2630-U	XG4M-2630	XG4U-3004
34	1	XG4M-3030-U	XG4M-3030	XG4U-3404
40	1	XG4M-3430-U	XG4M-3430	XG4U-4004
50	1	XG4M-4030-U	XG4M-4030	XG4U-5004
	2 (See note 3.)	XG4M-5030-U	XG4M-5030	
60	1	XG4M-5031-U	XG4M-5031	XG4U-6004
	2 (See note 3.)	XG4M-6030-U	XG4M-6030	
64	1	XG4M-6031-U	XG4M-6031	XG4U-6404
	2 (See note 3.)	XG4M-6430-U	XG4M-6430	
		XG4M-6431-U	XG4M-6431	

Note: 1. With open-end cover. 2. Strain Relief sold separately. 3. Polarity guide pitch is 22.86 mm.

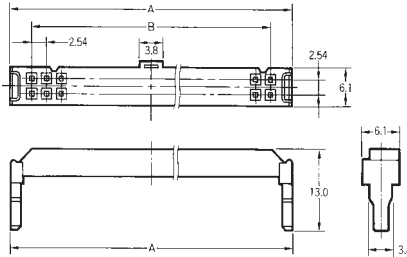
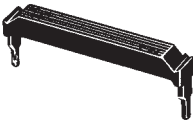
XG4M-U MIL Sockets

■ Dimensions

XG4M-□□30 (one polarizing guide)
XG4M-□□31 (all others)



XG4T-□□04
Strain Relief



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
10	17.3	10.16
14	22.3	15.24
16	24.9	17.78
20	30.0	22.86
26	37.6	30.48
30	42.7	35.56
34	47.7	40.64
40	55.4	48.26
50	68.1	60.96
60	80.8	73.66
64	85.8	78.74

XG4M-□□30-T (XG4M-□□30 + XG4T-□□04)
XG4M-□□31-T (XG4M-□□31 + XG4T-□□04)
MIL Socket and Strain Relief Sets

■ Ordering Information

No. of contacts	No. of polarity guides	Socket and Strain Relief Set (See note 1.)	Socket with Open-end Cover (See note 2.)	Strain Relief for the XG4M
10	0			XG4T-1004
	1	XG4M-1031-T	XG4M-1031	
14	1	XG4M-1430-T	XG4M-1430	XG4T-1404
16	1	XG4M-1630-T	XG4M-1630	XG4T-1604
20	1	XG4M-2030-T	XG4M-2030	XG4T-2004
26	1	XG4M-2630-T	XG4M-2630	XG4T-2604
30	1	XG4M-3030-T	XG4M-3030	XG4T-3004
34	1	XG4M-3430-T	XG4M-3430	XG4T-3404
40	1	XG4M-4030-T	XG4M-4030	XG4T-4004
50	1	XG4M-5030-T	XG4M-5030	XG4T-5004
	2 (See note 3.)	XG4M-5031-T	XG4M-5031	
60	1	XG4M-6030-T	XG4M-6030	XG4T-6004
	2 (See note 3.)	XG4M-6031-T	XG4M-6031	
64	1	XG4M-6430-T	XG4M-6430	XG4T-6404
	2 (See note 3.)	XG4M-6431-T	XG4M-6431	

Note: 1. With open-end cover.

2. Strain Relief sold separately.

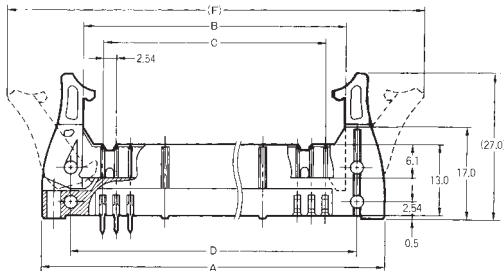
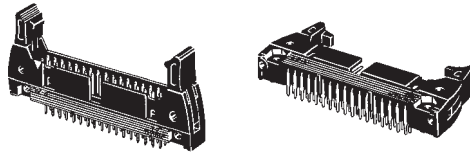
3. Polarity guide pitch is 22.86 mm.

XG4A MIL Plugs with Long Locks

■ Dimensions

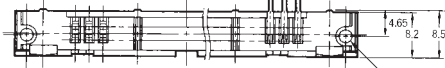
XG4A-□□31/-□□71 (With straight DIP terminals)

XG4A-□□34/-□□74 (With right-angle DIP terminals)

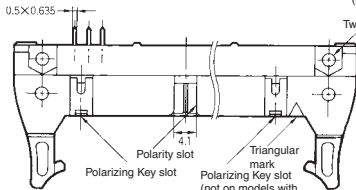


Straight DIP terminals

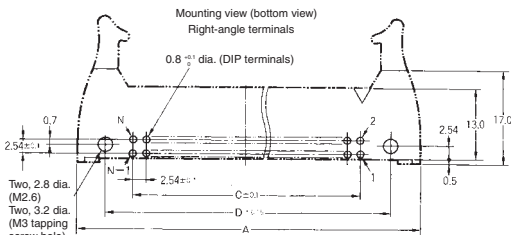
Right-angle DIP terminals



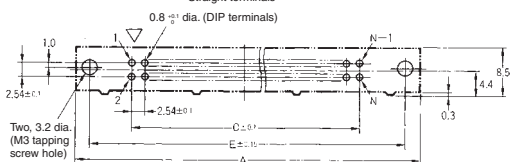
Two, 2.6 dia.
(M3 tapping screw hole)



Two, 2.65 dia.

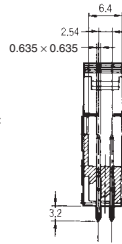


Straight terminals



Straight DIP terminals

Right-angle DIP terminals



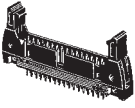
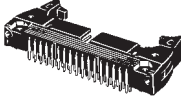
Dimensions

No. of contacts	Dimensions (mm)					
	A	B	C	D	E	F
10	32.0	17.5	10.16	21.8	27.9	46.4
14	37.1	22.6	15.24	26.9	33.0	51.5
16	39.6	25.2	17.78	29.5	35.6	54.1
20	44.7	30.2	22.86	34.5	40.6	59.1
26	52.3	37.9	30.48	42.2	48.3	66.8
30	57.4	42.9	35.56	47.2	53.3	71.8
34	62.5	48.0	40.64	52.3	58.4	76.9
40	70.1	55.6	48.26	59.9	66.0	84.5
50	82.8	68.3	60.96	72.6	78.7	97.2
60	95.5	81.0	73.66	85.3	91.4	109.9
64	100.6	86.1	78.74	90.4	96.5	115.0

Note: See page 1029 for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarity slots.

■ Ordering Information

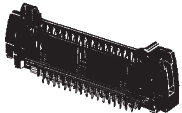
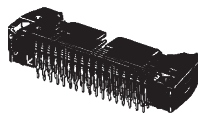
Use in Combination with Strain-relief Sockets.

No. of contacts	No. of polarizing shots	Plugs with straight DIP terminals	Plugs with right-angle DIP terminals
10	0	 XG4A-1071	 XG4A-1074
	1	XG4A-1031	XG4A-1034
14	1	XG4A-1431	XG4A-1434
16	1	XG4A-1631	XG4A-1634
20	1	XG4A-2031	XG4A-2034
26	1	XG4A-2631	XG4A-2634
30	1	XG4A-3031	XG4A-3034
34	1	XG4A-3431	XG4A-3434
40	1	XG4A-4031	XG4A-4034
50	1	XG4A-5031	XG4A-5034
	2 (See note.)	XG4A-5071	XG4A-5074
60	1	XG4A-6031	XG4A-6034
	2 (See note.)	XG4A-6071	XG4A-6074
64	1	XG4A-6431	XG4A-6434
	2 (See note.)	XG4A-6471	XG4A-6474

Note: Polarizing slot pitch is 22.86 mm.

■ Ordering Information

Use in Combination with Strain-relief Sockets.

No. of contacts	No. of polarizing shots	Plugs with straight DIP terminals	Plugs with right-angle DIP terminals
10	0	 XG4A-1073	 XG4A-1076
	1	XG4A-1033	XG4A-1036
14	1	XG4A-1433	XG4A-1436
16	1	XG4A-1633	XG4A-1636
20	1	XG4A-2033	XG4A-2036
26	1	XG4A-2633	XG4A-2636
30	1	XG4A-3033	XG4A-3036
34	1	XG4A-3433	XG4A-3436
40	1	XG4A-4033	XG4A-4036
50	1	XG4A-5033	XG4A-5036
	2 (See note.)	XG4A-5073	XG4A-5076
60	1	XG4A-6033	XG4A-6036
	2 (See note.)	XG4A-6073	XG4A-6076
64	1	XG4A-6433	XG4A-6436
	2 (See note.)	XG4A-6473	XG4A-6476

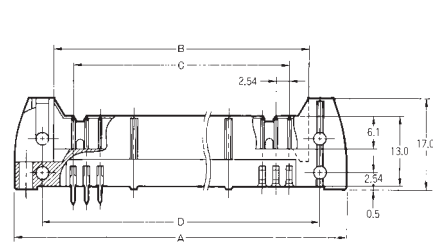
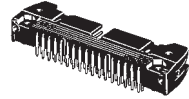
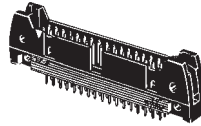
Note: Polarizing slot pitch is 22.86 mm.

XG4A MIL Plugs without Lock Levers

■ Dimensions

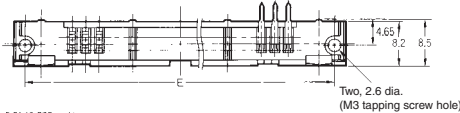
XG4A-□□33/□□73 (With straight DIP terminals)

XG4A-□□36/□□76 (With right-angle DIP terminals)



Straight DIP terminals

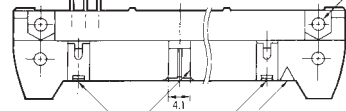
Right-angle DIP terminals



0.5X0.635

Two, 2.6 dia.
(M3 tapping screw hole)

Two, 2.65 dia.



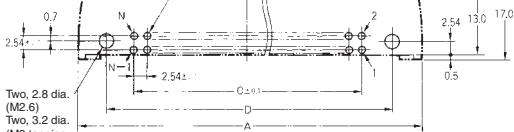
Polarizing Key slot

Triangular mark
Polarizing Key slot
(not on models with less than 14 contacts)

Mounting holes (bottom view)

Right-angle terminals

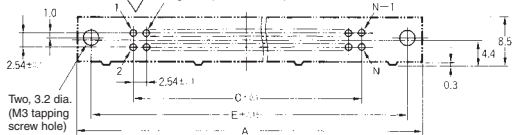
0.8 \pm 0.01 dia. (DIP terminals)



Two, 2.8 dia.
(M2.6)
Two, 3.2 dia.
(M3 tapping screw hole)

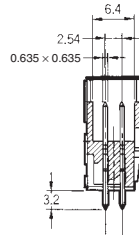
Straight terminals

0.8 \pm 0.01 dia. (DIP terminals)

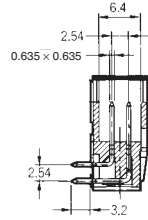


Two, 3.2 dia.
(M3 tapping screw hole)

Straight DIP terminals



Right-angle DIP terminals



Dimensions

No. of contacts	Dimensions (mm)				
	A	B	C	D	E
10	32.0	17.5	10.16	21.8	27.9
14	37.1	22.6	15.24	26.9	33.0
16	39.6	25.2	17.78	29.5	35.6
20	44.7	30.2	22.86	34.5	40.6
26	52.3	37.9	30.48	42.2	48.3
30	57.4	42.9	35.56	47.2	53.3
34	62.5	48.0	40.64	52.3	58.4
40	70.1	55.6	48.26	59.9	66.0
50	82.8	68.3	60.96	72.6	78.7
60	95.5	81.0	73.66	85.3	91.4
64	100.6	86.1	78.74	90.4	96.5

Note: See page 1029 for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarizing slots.

■ Ordering Information

No. of contacts	No. of polarizing shots	Plugs with straight DIP terminals	Plugs with right-angle DIP terminals
10	0	XG4A-1073	XG4A-1076
	1	XG4A-1033	XG4A-1036
14	1	XG4A-1433	XG4A-1436
16	1	XG4A-1633	XG4A-1636
20	1	XG4A-2033	XG4A-2036
26	1	XG4A-2633	XG4A-2636
30	1	XG4A-3033	XG4A-3036
34	1	XG4A-3433	XG4A-3436
40	1	XG4A-4033	XG4A-4036
50	1	XG4A-5033	XG4A-5036
	2 (See note.)	XG4A-5073	XG4A-5076
60	1	XG4A-6033	XG4A-6036
	2 (See note.)	XG4A-6073	XG4A-6076
64	1	XG4A-6433	XG4A-6436
	2 (See note.)	XG4A-6473	XG4A-6476

Note: Polarizing slot pitch is 22.86 mm.

Lock Levers

- This series of Connectors allows you to attach Lock Levers on Right-angle Terminal Plugs after automated soldering is completed.
- Lock Levers can be easily mounted simply by manually pushing them in.



XG4Z-0010
Long Lock Lever



XG4Z-0011
Short Lock Lever

Type	Model	Min. order
Long Lock Levers	XG4Z-0010	20
Short Lock Levers	XG4Z-0011	
Slim Long Lock Levers	XG4Z-0012	
Slim Short Lock Levers	XG4Z-0013	

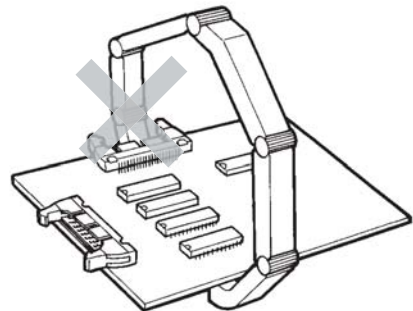
Note: The left and right Lock Levers are identical. One pair is needed for each Plug.

Attachment after Soldering

- Long Levers interfere with automated mounting.
- Long Levers are in the way when boards are packed.



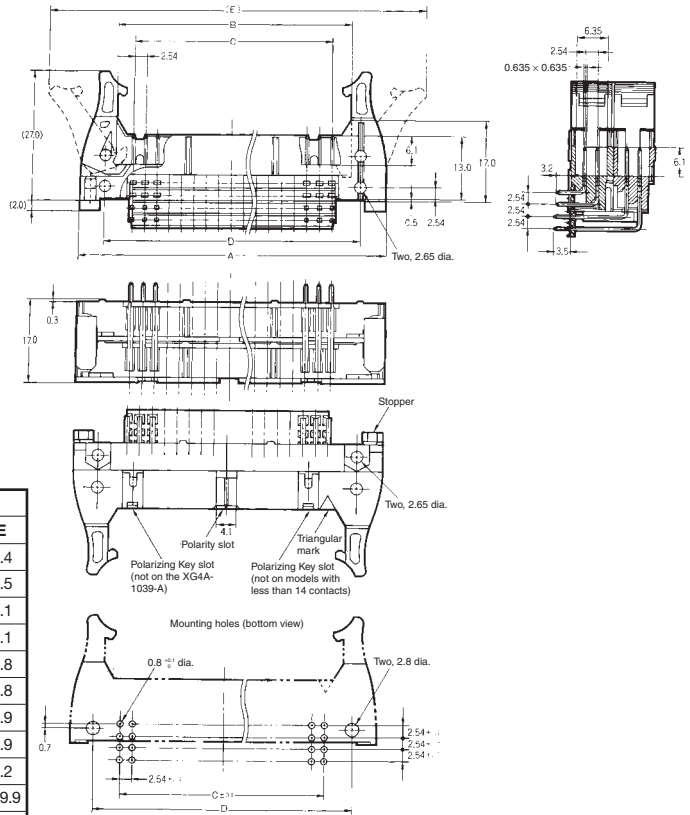
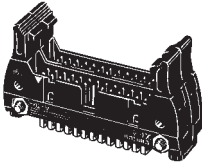
- These problems are resolved using Connectors with Long Levers that can be attached after soldering is completed.



XG4A 2-tier Plugs with Long Lock

■ Dimensions

XG4A-□□39-A/-□□79-A
(With long locks and right-angle
DIP terminals)



Dimensions

No. of contacts	Dimensions (mm)				
	A	B	C	D	E
10 x 2	32.0	17.5	10.16	21.8	46.4
14 x 2	37.1	22.6	15.24	26.9	51.5
16 x 2	39.6	25.2	17.78	29.5	54.1
20 x 2	44.7	30.2	22.86	34.5	59.1
26 x 2	52.3	37.9	30.48	42.2	66.8
30 x 2	57.4	42.9	35.56	47.2	71.8
34 x 2	62.5	48.0	40.64	52.3	76.9
40 x 2	70.1	55.6	48.26	59.9	84.9
50 x 2	82.8	68.3	60.96	72.6	97.2
60 x 2	95.5	81.0	73.66	85.3	109.9
64 x 2	100.6	86.1	78.74	90.4	115.0

Note: Polarizing slot pitch is 22.86 mm for 50-, 60-, and 64-contact Connectors.

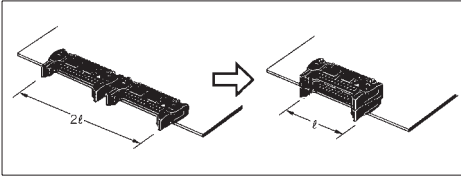
■ Ordering Information

No. of contacts	No. of polarizing slots	Model	No. of contacts	No. of polarity slots	Model
10 x 2	0	XG4A-1079-A	40 x 2	1	XG4A-4039-A
	1	XG4A-1039-A			
14 x 2	1	XG4A-1439-A	50 x 2	1	XG4A-5039-A
16 x 2	1	XG4A-1639-A		2 (See note 2.)	XG4A-5079-A
20 x 2	1	XG4A-2039-A	60 x 2	1	XG4A-6039-A
26 x 2	1	XG4A-2639-A		2 (See note 2.)	XG4A-6079-A
30 x 2	1	XG4A-3039-A	64 x 2	1	XG4A-6439-A
34 x 2	1	XG4A-3439-A		2 (See note 2.)	XG4A-6479-A

Note: 1. Comes in a set with stopper and screws included.

2. Polarizing slot pitch is 22.86 mm.

■ Mounting Example



■ 2-tier Plug Features

- Recommended for high-density mounting.
- MIL-compliant cable ensures faster delivery times and lower cost than half-pitch board cable. The 2.54-mm pitch simplifies patterning.

■ Applicable Sockets

No. of contacts	No. of polarity slots	Model	XG4M for flat cable (See note 1.)	XG5M-N for discrete wire (See note 2.)
10 x 2	0	XG4A-1079-A	XG4M-1031	XG5M-103@-N
	1	XG4A-1039-A	XG4M-1030	XG5M-103@-N
14 x 2	1	XG4A-1439-A	XG4M-1430	XG5M-143@-N
16 x 2	1	XG4A-1639-A	XG4M-1630	XG5M-163@-N
20 x 2	1	XG4A-2039-A	XG4M-2030	XG5M-203@-N
26 x 2	1	XG4A-2639-A	XG4M-2630	XG5M-263@-N
30 x 2	1	XG4A-3039-A	XG4M-3030	XG5M-303@-N
34 x 2	1	XG4A-3439-A	XG4M-3430	XG5M-343@-N
40 x 2	1	XG4A-4039-A	XG4M-4030	XG5M-403@-N
50 x 2	1	XG4A-5039-A	XG4M-5030	XG5M-503@-N
	2 (See note 3.)	XG4A-5079-A	XG4M-5031	
60 x 2	1	XG4A-6039-A	XG4M-6030	XG5M-603@-N
	2 (See note 3.)	XG4A-6079-A	XG4M-6031	
64 x 2	1	XG4A-6439-A	XG4M-6430	XG5M-643@-N
	2 (See note 3.)	XG4A-6479-A	XG4M-6431	

Note: 1. Use with supplied Strain Relief.

2. Use with the supplied semi-cover. Hood cover cannot be used.

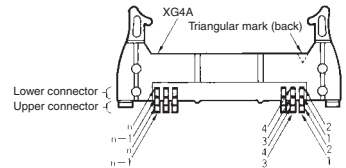
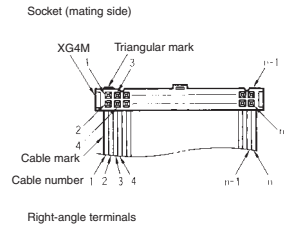
3. Polarity slot pitch is 22.86mm.

■ Cable Number and Contact Position

Cable and Corresponding Contact Number

The contact numbers are not marked on the Connector. Use the triangular mark as a guide when wiring and designing circuit boards.

For the cable number, count starting from the cable mark side as shown below.



■ Precautions

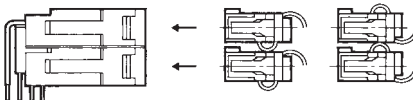
Correct Use

Mounting

- Be sure to anchor the board with screws before mounting.
- Note that a Polarizing Key cannot be mounted on the lower Plug.

Connecting the Socket

- Before connecting the XG4M with Strain Relief, remove as much slack from the cable as possible. Insert as shown below.
- Attach the Semi-cover before connecting the XG5M-N. It is not possible to use the Hood Cover.



Soldering

Automated Soldering Conditions (Jet Flow)

1. Soldering temperature: 250 ±5°C
2. Continuous soldering time: Within 5 s

XG4E Relay Plugs

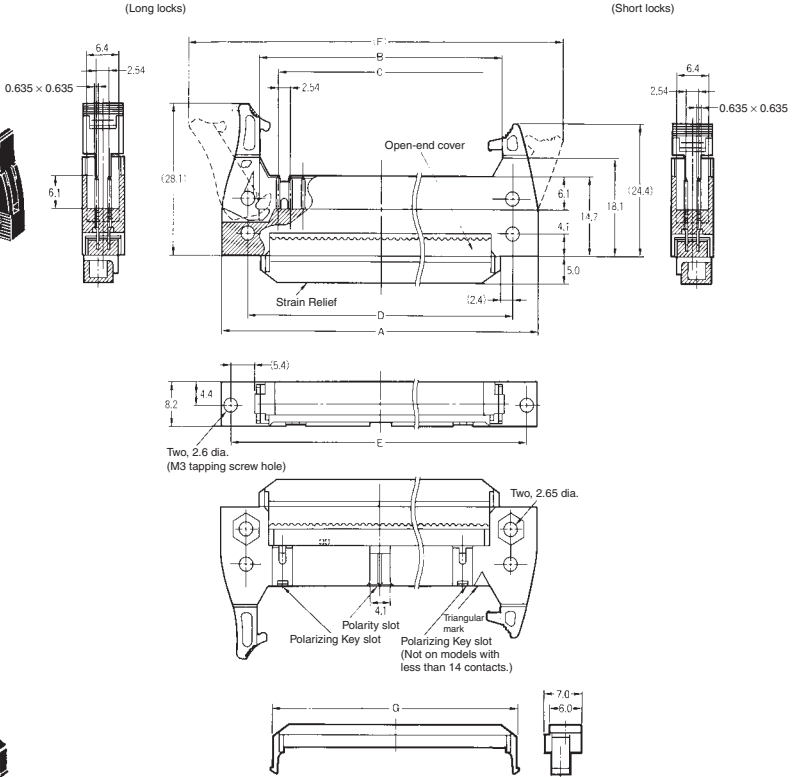
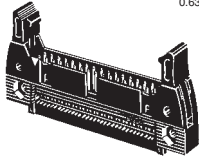
■ Dimensions

XG4E-□□31/□□71

(With long locks)

XG4E-□□32/□□72

(With short locks)



XG4S-□□04
Strain Relief



Dimensions

No. of contacts	Dimensions (mm)							
	A	B	C	D	E	F		G
						Long Lock	Short Lock	
10	32.0	17.5	10.16	21.8	27.9	46.4	40.4	16.9
14	37.1	22.6	15.24	26.9	33.0	51.5	45.5	22.0
16	39.6	25.2	17.78	29.5	35.6	54.1	46.0	24.6
20	44.7	30.2	22.86	34.5	40.6	59.1	53.1	29.6
26	52.3	37.9	30.48	42.2	48.3	66.8	60.7	38.0
30	57.4	42.9	35.56	47.2	53.3	71.8	65.8	42.3
34	62.5	48.0	40.64	52.3	58.4	76.9	70.9	47.4
40	70.1	55.6	48.26	59.9	66.0	84.5	78.5	55.0
50	82.8	68.3	60.96	72.6	78.7	97.2	91.2	67.7
60	95.5	81.0	73.66	85.3	91.4	109.9	103.9	80.4
64	100.6	86.1	78.74	90.4	96.5	115.0	109.0	85.5

Note: See 1029 for details on the availability (10-contact Connectors) and pitch (with 50, 60, or 64-contact Connectors) of polarity slots.

■ Ordering Information

■ Relay Plugs

Use Long-lock Plugs together with Strain-relief Sockets, and use Short-lock Plugs together with Non-strain-relief Sockets.

No. of contacts	No. of polarizing guides	Long-lock Plugs with Open-end Covers (See note 1.)	Short-lock Plugs with Open-end Covers (See note 1.)	Strain Reliefs for XG4E
10	0	XG4E-1071	XG4E-1072	XG4S-1004
	1	XG4E-1031	XG4E-1032	
14	1	XG4E-1431	XG4E-1432	XG4S-1404
16	1	XG4E-1631	XG4E-1632	XG4S-1604
20	1	XG4E-2031	XG4E-2032	XG4S-2004
26	1	XG4E-2631	XG4E-2632	XG4S-2604
30	1	XG4E-3031	XG4E-3032	XG4S-3004
34	1	XG4E-3431	XG4E-3432	XG4S-3404
40	1	XG4E-4031	XG4E-4032	XG4S-4004
50	1	XG4E-5031	XG4E-5032	XG4S-5004
	2 (See note 2.)	XG4E-5071	XG4E-5072	
60	1	XG4E-6031	XG4E-6032	XG4S-6004
	2 (See note 2.)	XG4E-6071	XG4E-6072	
64	1	XG4E-6431	XG4E-6432	XG4S-6404
	2 (See note 2.)	XG4E-6471	XG4E-6472	

Note: 1. Strain Relief sold separately.

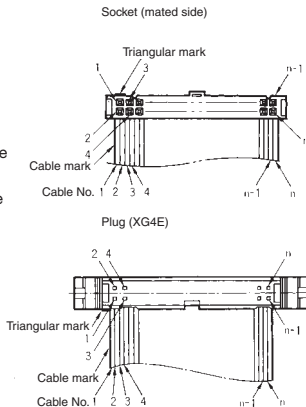
2. Polarity guide pitch is 22.86 mm.

■ Cable Number and Contact Position

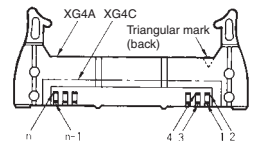
Cable and Corresponding Contact Number

The contact numbers are not marked on the Connector. Use the triangular mark as a guide when wiring and designing circuit boards.

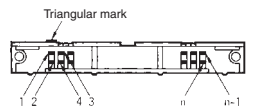
For the cable number, count starting from the cable mark side as shown on the right.



Right-angle Terminal Plug (terminal side)

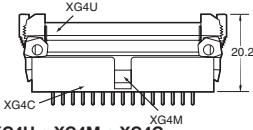


Straight Terminal Plug (terminal side)

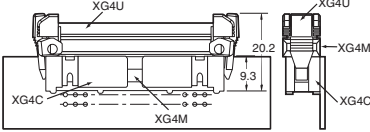


■ Mating Diagram for XG4M

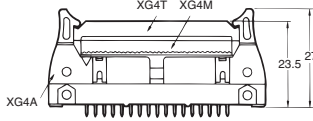
XG4U + XG4M + XG4C
(With straight terminals)



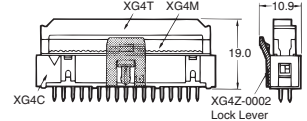
XG4U + XG4M + XG4C
(With right-angle terminals)



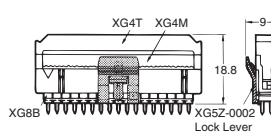
XG4T + XG4M + XG4A



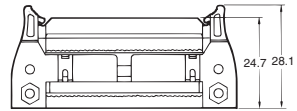
XG4T + XG4M, + XG4C + Lock Lever



XG4T + XG4M + XG8B (Unshrouded Plug) + Lock Lever



XG4T + XG4M + XG4E



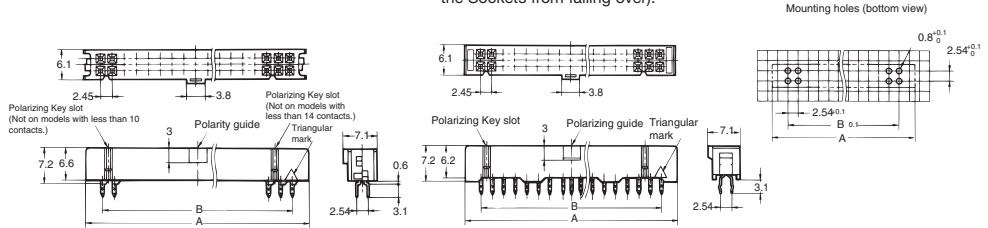
■ Polarity Slot and Polarizing Key Slot Number and Position

Classification	No. of contacts			
	10 contacts	14 contacts	16 to 40 contacts	50 to 64 contacts
XG4M MIL Socket	XG4M-1031 	XG4M-1030 	XG4M-1430 	XG4M-1630 to XG4M-6430 Polarizing key slot
				--- XG4M-5031, XG4M-6031, XG4M-6431
XG4A MIL Plug XG4E IDC Plug	XG4A-107□ XG4E-107□	XG4A-103□ XG4E-103□	XG4A-143□ XG4E-143□	XG4A-163□ to XG4A-643@ Polarizing key slot XG4E-163□ to XG4E-643□
				--- XG4A-507□, XG4A-607□, XG4A-647□ Polarizing key slot XG4E-507@, XG4E-607@, XG4E-647@
XG4C Box-type Plug	XG4C-107□ 	XG4C-103□ 	XG4C-143□ 	XG4C-163□ to XG4C-643□ Polarizing key slot
				--- XG4C-507□, XG4C-607□, XG4C-647□ Polarizing key slot
No. of polarizing guides (Polarizing Slots)	0	1	1	1 2 (H = 22.86 mm)
No. of Polarizing Key slot (Polarizing Key Slots)	1	0	1	2

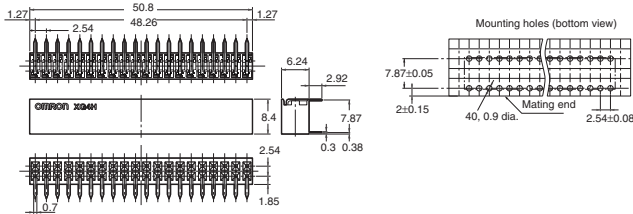
XG4H Board-to-Board Sockets

■ Dimensions

XG4H-□□31/-□□71
(With straight DIP terminals)



XG4H-4034
(With right angle DIP terminals)



Dimensions

No. of contacts	A	B
10	17.3	10.16
14	22.3	15.24
16	24.9	17.78
20	30.0	22.86
26	37.6	30.48
30	42.7	35.56
34	47.7	40.64
40	55.4	48.26
50	68.1	60.96
60	80.8	73.66
64	85.8	78.74

■ Ordering Information

No. of contacts	No. of polarizing shots	Sockets with straight DIP terminals
10	1	XG4H-1031
14	1	XG4H-1431
16	1	XG4H-1631
20	1	XG4H-2031
26	1	XG4H-2631
30	1	XG4H-3031
34	1	XG4H-3431-1
40	1	XG4H-4031-1
50	1	XG4H-5031
	2 (See note.)	XG4H-5071
60	1	XG4H-6031
	2 (See note.)	XG4H-6071
64	1	XG4H-6431
	2 (See note.)	XG4H-6471

No. of contacts	Sockets with right-angle DIP terminals
40	XG4H-4034

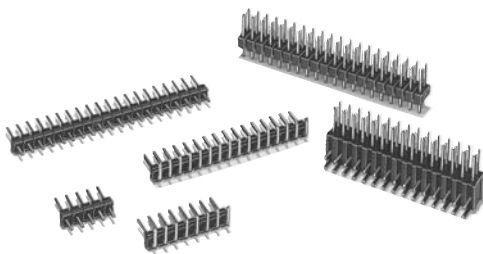
Note: Polarizing slot pitch is 22.86 mm.

Flat Cable Connectors - XG4

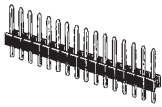

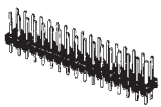





Socket	Plug	XG8W Original Plugs	XG4C Box-type Plugs
XG4H-□□31/-□□71 (With straight DIP terminals)			
XG4H-4034 (With right-angle DIP terminals)			---

Original Plug that can be used in a wide range of applications.

- Can use as a Plug for different Sockets.
Applicable Sockets:
XG4M Flat Cable Connector
XG5 Discrete-wire IDC Connector
- OMRON's unique production system maintains low costs.
- Straight Terminal Plugs are easily divided into the desired number of contacts.
- Through-holes handle 0.8-mm wires.
- With Double-row Plugs with right-angle terminals, block-base soldering improves productivity while lock levers simplify locking (excluding XG8V and XG8W Plugs with straight terminals).
- Simply cut to divide (excluding XG8W Right-angle Plugs).



■ Connectors

Model	XG8V		XG8W	
Appearance	Single-row plugs with straight terminals 	Single-row plugs with right-angle terminals 	Double-row plugs with straight terminals 	Double-row plugs with right-angled terminals 
Model	XG8V		XG8W	
Appearance	Single-row plugs with straight terminals 	Single-row plugs with right-angle terminals 	Double-row plugs with straight terminals 	Double-row plugs with right-angled terminals 

■ Ratings and Characteristics

Rated current	3 A (See note 1.)
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.) (See note 2.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min. (leakage current: 1 mA max.)
Ambient temperature	Operating: -55 to 105°C (with no icing)

Note: 1. The rated current will depend on the Socket you are using. It is 1 A using the XG4M for example.

2. The contact resistance is measured with the Plug mated to an XG5M-N.

Materials and Finish

Model		XG8V and XG8W (See note.)	XG8A and XG8B
Base		Fiber-glass reinforced PBT resin (UL94V-0)/black	
Contacts	Mating end	Brass/nickel base, 0.15- μ m gold plating	Brass/nickel base, 0.15- μ m gold plating
	Terminal	Brass/nickel base, tin plating	Brass/nickel base, tin plating

Applicable Sockets

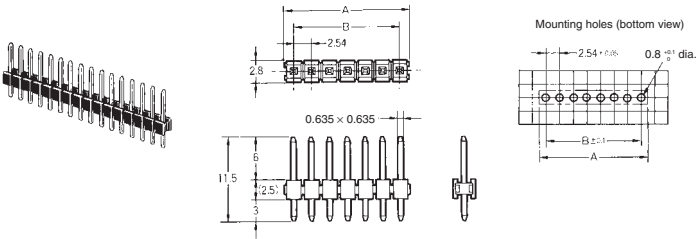
XG8W and XG8B (Double Row)	XG4M Flat Cable Connectors (Sockets)
	XG4H Board-to-Board Connectors (Sockets)
	XG5M-N Discrete-wire IDC Connectors (Double-row Sockets)

XG8V Single-Row Original Plugs

Dimensions

XG8V-□□31
(With gold-plated straight terminals)

XG8V-□□41
(With tin-plated straight terminals)



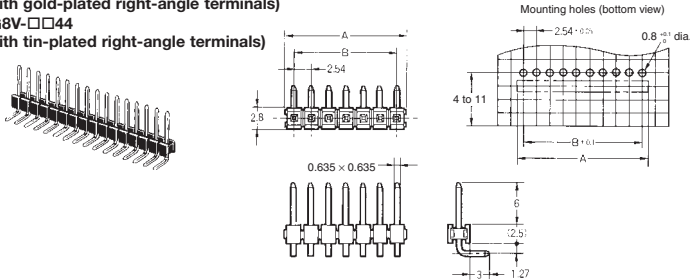
Dimensions

No. of contacts	Dimensions (mm)	
	A	B
3	7.6	5.08
4	10.2	7.62
5	12.7	10.16
6	15.2	12.70
7	17.8	15.24
8	20.3	17.78
10	25.4	22.86
12	30.5	27.94
13	33.0	30.48
15	38.1	35.56
16	40.6	38.10
17	43.2	40.64
20	50.8	48.26
36	91.4	88.90

Dimensions

XG8V-□□34
(With gold-plated right-angle terminals)

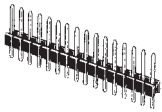
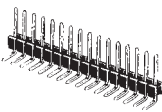
XG8V-□□44
(With tin-plated right-angle terminals)



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
3	7.6	5.08
4	10.2	7.62
5	12.7	10.16
6	15.2	12.70
7	17.8	15.24
8	20.3	17.78
10	25.4	22.86
12	30.5	27.94
13	33.0	30.48
15	38.1	35.56
16	40.6	38.10
17	43.2	40.64
20	50.8	48.26
36	91.4	88.90

■ Ordering Information

Appearance	Plugs with straight terminals		Plugs with right-angle terminals	
				
No. of contacts	Model (gold plated)	Model (tin plated)	Model (gold plated)	Model (tin plated)
3	XG8V-0331	XG8V-0341	XG8V-0334	XG8V-0344
4	XG8V-0431	XG8V-0441	XG8V-0434	XG8V-0444
5	XG8V-0531	XG8V-0541	XG8V-0534	XG8V-0544
6	XG8V-0631	XG8V-0641	XG8V-0634	XG8V-0644
7	XG8V-0731	XG8V-0741	XG8V-0734	XG8V-0744
8	XG8V-0831	XG8V-0841	XG8V-0834	XG8V-0844
10	XG8V-1031	XG8V-1041	XG8V-1034	XG8V-1044
12	XG8V-1231	XG8V-1241	XG8V-1234	XG8V-1244
13	XG8V-1331	---	XG8V-1334	---
15	XG8V-1531	---	XG8V-1534	---
16	XG8V-1631	XG8V-1641	XG8V-1634	XG8V-1644
17	XG8V-1731	---	XG8V-1734	---
20	XG8V-2031	XG8V-2041	XG8V-2034	XG8V-2044
36	XG8V-3631	XG8V-3641	XG8V-3634	XG8V-3644

XG8W Original Plugs for MIL Connectors

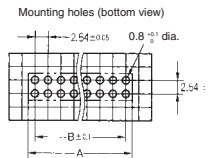
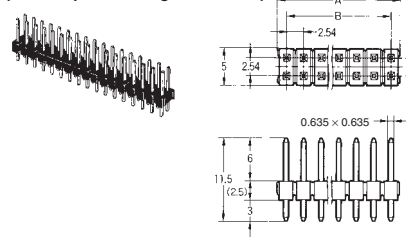
■ Dimensions

XG8W-□□31

(With gold-plated straight terminals)

XG8W-□□41

(With tin plated straight terminals)



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
10	12.7	10.16
14	17.8	15.24
16	20.3	17.78
20	25.4	22.86
26	33.0	30.48
30	38.1	35.56
34	43.2	40.46
40	50.8	48.26
50	63.5	60.96
60	76.2	73.66

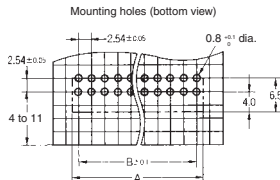
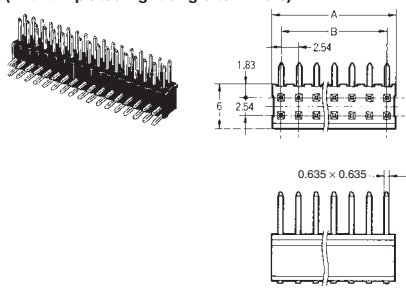
■ Dimensions

XG8W-□□34

(With gold-plated right-angle terminals)

XG8W-□□44



(With tin-plated right-angle terminals)



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
20	25.4	22.86
26	33.0	30.48
30	38.1	35.56
34	43.2	40.64
40	50.8	48.26
50	63.5	60.96

Ordering Information

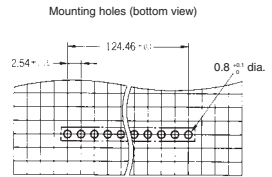
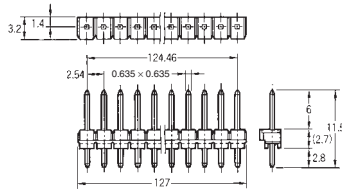
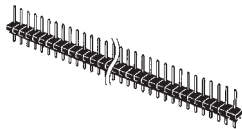
Appearance	Plugs with straight terminals		Plugs with right-angle terminals	
				
No. of contacts	Model (gold plated)	Model (tin plated)	Model (gold plated)	Model (tin plated)
10	XG8W-1031	XG8W-1041	---	---
14	XG8W-1431	XG8W-1441	---	---
16	XG8W-1631	XG8W-1641	---	---
20	XG8W-2031	XG8W-2041	XG8W-2034	XG8W-2044
26	XG8W-2631	XG8W-2641	XG8W-2634	XG8W-2644
30	XG8W-3031	XG8W-3041	XG8W-3034	XG8W-3044
34	XG8W-3431	XG8W-3441	XG8W-3434	XG8W-3444
40	XG8W-4031	XG8W-4041	XG8W-4034	XG8W-4044
50	XG8W-5031	XG8W-5041	XG8W-5034	XG8W-5044
60	XG8W-6031	XG8W-6041	---	---

Original Plugs for MIL Connectors XG8A (Single-row)/XG8B (Double-row)

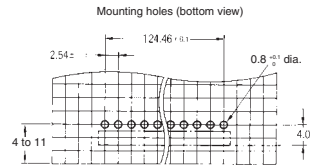
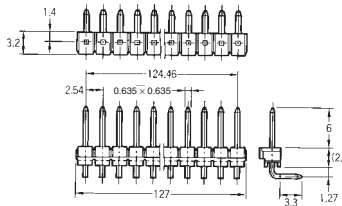
Dimensions

Single-row Plugs

XG8A-5031
(With straight terminals)

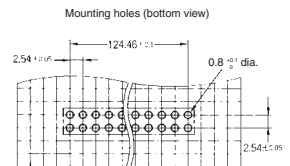
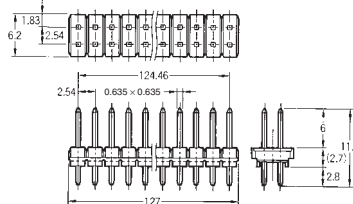
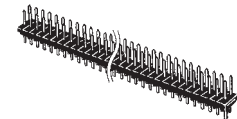


XG8A-5034
(With right-angle terminals)



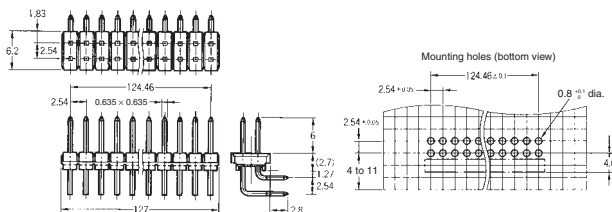
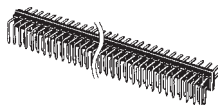
Double-row Plugs

XG8B-0131
(With straight terminals)



Original Plugs - XG8

XG8B-0134 (With right-angle terminals)



■ Ordering Information

Terminal type	Plugs with straight terminals	Plugs with right-angle terminals
No. of contacts	Model (gold plated)	Model (gold plated)
50 (Single-row)	XG8A-5031	XG8A-5034
100 (Double-row)	XG8A-0131	XG8A-0134

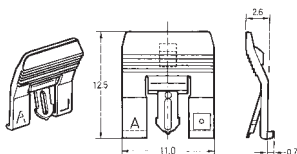
■ Accessories

Lock Levers

XG5Z-0002

Can be used to lock XG8W Double-row Right-angle Terminal Plugs to XG4M Flat Cables and XG5M-N Discrete-wire IDC Connectors.

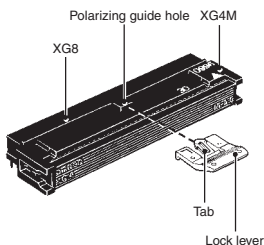
They cannot be used with XG8W Double-row Straight Terminal Plugs or XG8V Single-row Plugs.



Note: Order the above model in multiples of the minimum order.

Mounting the Lock Lever

Insert the tab on the Lock Lever into the hole on a Socket with a polarity guide. In this way, it can be locked with XG8W Right-angle Terminal Plugs.

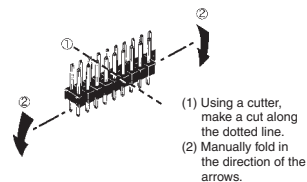


■ Precautions

Correct Use

Dividing the XG8W (with Straight Terminals), XG8V, XG8A, and XG8B

- Using a Cutter, make a cut on the slot as indicated by the dotted line in the diagram. Then fold the Plug manually in the direction of the arrows.



Automated Soldering Conditions (Jet Flow)

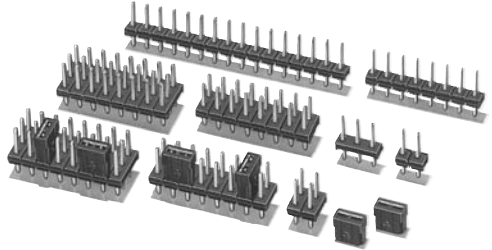
- Soldering temperature: $250 \pm 5^\circ\text{C}$
- Continuous soldering time: Within 5 s

■ Ordering Procedure


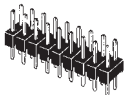
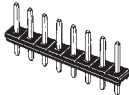
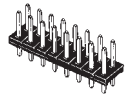
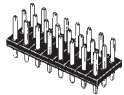

- Contact your OMRON representative if you require a product with a non-standard number of contacts.

Low-profile Circuit Jumper Connectors

- Low profiles that are only 5.8 mm (XJ8) and 6.8 mm (XG8S/T) high on the board.
- 2.54-mm high-density grid can be mounted horizontally or vertically.
- From Single-row up to Triple-row Connectors.
- Through-holes handle 0.8-mm wires.
- Designed for easy insertion and protection against accidental removal.
- Highly-reliable 2-point contacts.
- Thin Plug Housing (XJ8) employs flame-resistant PPS resin.
- XJ8 Connectors conform to UL standards (file no. E103202) and CSA standards (file no. LR 62678).



Connectors

Model	XG8S	XG8T	XJ8B	XJ8C	XJ8D	XJ8A
Appearance	Single-row Plugs 	Double-row Plugs 	Single-row Plugs 	Double-row Plugs 	Triple-row Plugs 	Jumper Socket 

Ratings and Characteristics

Item	Gold plating	Solder plating
Rated voltage	2 A	
Rated current	300 VAC	
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Withstand voltage	750 VAC for 1 min (leakage current: 1 mA max.)	
Insertion force (See note.)	1.96 N max.	7.85 N max.
Removal force (See note.)	0.39 N min.	0.98 N min.
Insertion durability	50 times	20 times
Ambient temperature	Operating: - 55 to 105°C (with no icing)	

Note: Insertion and removal force are for the XJ8A.

Materials and Finish

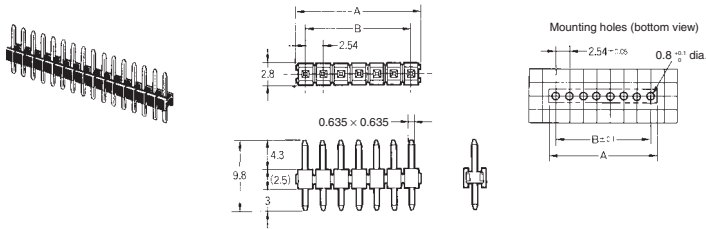
Item	XJ8A	XJ8B/C/D	XG8S/T
Housing	Fiber-glass reinforced PBT resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/black
Contacts	Phosphor bronze/nickel base, 0.15-μm gold plating	Brass/nickel base, 0.15-μm gold plating (See note.)	Brass/nickel base, 0.15-μm gold plating
	Phosphor bronze/nickel base, tin plating	---	Brass/nickel base, tin plating

Note: For non-standard plating, contact your OMRON representative.

XG8S Single-row Jumper Plugs

■ Dimensions

XG8S-□□31 (gold plating)
XG8S-□□41 (solder)



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
2	5.1	2.54
3	7.6	5.08
4	10.2	7.62
6	15.2	12.70
8	20.3	17.78
16	40.6	38.10
18	45.7	43.18

■ Ordering Information

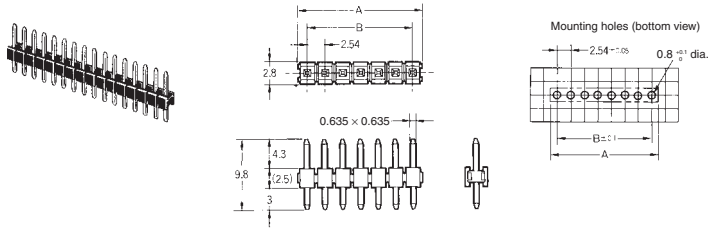
No. of contacts	Model	
	Model (gold plating)	Model (tin plating)
2	XG8S-0231	XG8S-0241
3	XG8S-0331	XG8S-0341
4	XG8S-0431	XG8S-0441
6	XG8S-0631	---
8	XG8S-0831	XG8S-0841
16	XG8S-1631	XG8S-1641
18	XG8S-1831	---

XG8T Double-row Jumper Plugs

■ Dimensions

XG8T-□□31 (gold plating)

XG8T-□□41 (sold plating)



Dimensions

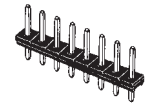
No. of contacts	Dimensions (mm)	
	A	B
2	2.5	---
4	5.1	2.54
6	7.6	5.08
8	10.2	7.62
10	12.7	10.16
12	15.2	12.70
14	17.8	15.24
16	20.3	17.78
18	22.9	20.32
20	25.4	22.86

■ Ordering Information

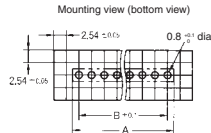
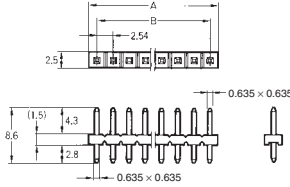
No. of contacts	Model	
	Model (gold plating)	Model (tin plating)
2	XG8T-0231	XG8T-0241
4	XG8T-0431	XG8T-0441
6	XG8T-0631	XG8T-0641
8	XG8T-0831	XG8T-0841
10	XG8T-1031	XG8T-1041
12	XG8T-1231	XG8T-1241
14	XG8T-1431	XG8T-1441
16	XG8T-1631	XG8T-1641
18	XG8T-1831	XG8T-1841
20	XG8T-2031	XG8T-2041

XJ8B/XJ8C/XJ8D Low-profile Single-, Double-, and Triple-row Jumper Plugs

■ Dimensions



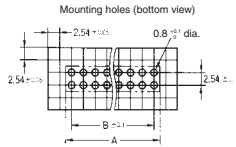
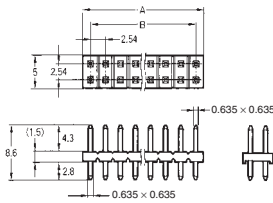
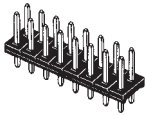
Single-row Plugs
XJ8B-□□11



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
2	5.1	2.54
3	7.6	5.08
4	10.2	7.62
8	20.3	17.78
16	40.6	38.10

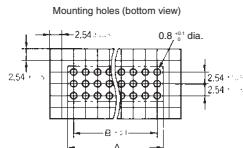
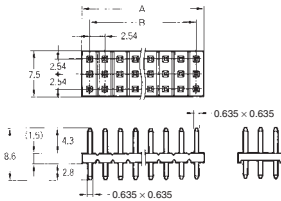
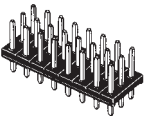
Double-row Plugs
XJ8C-□□11



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
2	2.5	---
4	5.1	2.54
6	7.6	5.08
8	10.2	7.62
10	12.7	10.16
12	15.2	12.70
14	17.8	15.24
16	20.3	17.78

Triple-row Plugs
XJ8D-□□11



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
3	2.5	---
6	5.1	2.54
9	7.6	5.08
12	10.2	7.62
15	12.7	10.16
18	15.2	12.70
21	17.8	15.24
24	20.3	17.78

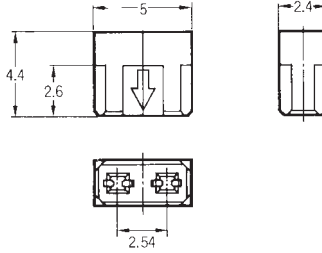
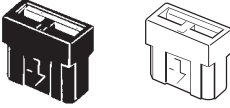
■ Ordering Information

Single-row Plugs		Double-row Plugs		Triple-row Plugs	
No. of contacts	Model (gold plated)	No. of contacts	Model (gold plated)	No. of contacts	Model (gold plated)
2	XJ8B-0211	2	XJ8C-0211	3	XJ8D-0311
3	XJ8B-0311	4	XJ8C-0411	6	XJ8D-0611
4	XJ8B-0411	6	XJ8C-0611	9	XJ8D-0911
8	XJ8B-0811	8	XJ8C-0811	12	XJ8D-1211
16	XJ8B-1611	10	XJ8C-1011	15	XJ8D-1511
		12	XJ8C-1211	18	XJ8D-1811
		14	XJ8C-1411	21	XJ8D-2111
		16	XJ8C-1611	24	XJ8D-2411

XJ8A Jumper Socket

■ Dimensions

Jumper Socket
 XJ8A-0211 (gold plating/black)
 XJ8A-0241 (tin plating/black)
 XJ8A-0214 (gold plating/natural)



■ Ordering Information

Type			
No. of contacts	Plating	Housing color	Model
2	Gold plating	Black	XJ8A-0211
	Tin plating	Black	XJ8A-0241
	Gold plating	Natural	XJ8A-0214

■ Precautions

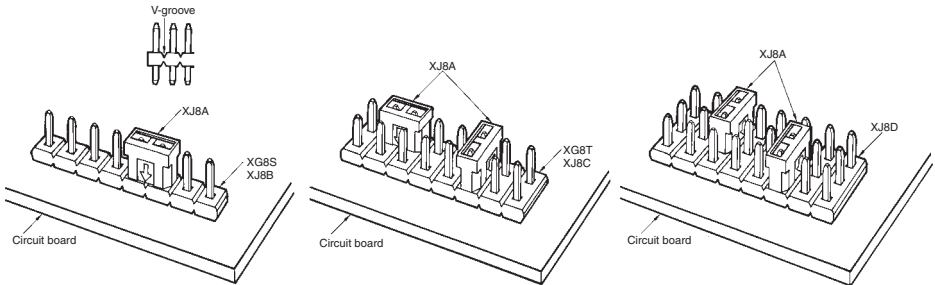
Correct Use

- Plugs can be easily cut along the V-groove.
- Jumper Socket should be inserted so that the arrow points down.

Automated Soldering Conditions (Jet Flow)

1. Soldering temperature: 250±5°C
2. Continuous soldering time: Within 5s

Mounting Example

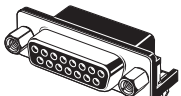
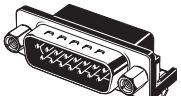
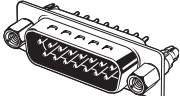
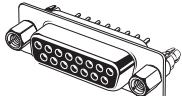



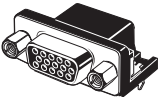
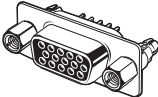

The D-sub Connector Series Enters a New Era with Lead-free Products.

- Determine anchor screw diameters at a glance.
- Greatly simplified anchor combinations.
- Shielded against EMI.
- EMI/RFI shielded hoods available.



■ Connectors

Classification	D-sub Connectors			
Model	XM3B-L	XM2C-L	XM2E-L	XM2F-L
Type	Sockets with Right-angle DIP Terminals	Plugs with Right-angle DIP Terminals	Plugs with Straight DIP Terminals	Sockets with Straight DIP Terminals
Appearance				

Classification	High-density D-sub Connectors			Anchors
Model	XM4K	XM4L	XM4L	XM4Z
Type	Plugs with Right-angle DIP Terminals	Sockets with Right-angle DIP Terminals	Sockets with Straight DIP Terminals	Anchor 2 or 3
Appearance				

■ Ratings and Characteristics

Rated current	3 A (at 20°C)
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC for 1 min)
Withstand voltage	1,000 VAC for 1 min (leakage current: 1 mA max.)
Insertion durability	100 times
Operating temperature	- 25 to 105°C (with no icing at low temperature)

■ Materials

Housing	Fiber-glass reinforced PBT resin (UL94V-0)/black
Socket contact	Phosphor bronze
Plug contact	Brass
Shell	Steel
Anchors	Brass
Lock Pin Grounding Fixture	Brass

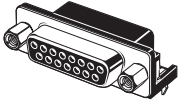
D-Sub Connectors - XM3-L/XM2-L/XM4K/XM4L

■ Finish

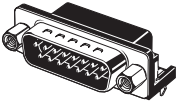
Contact	Mating end	Nickel base, flash gold plated
	Terminal	Nickel base, flash gold plated
Shell		Nickel plated
Anchors		Nickel plated
Grounding Fixture	Straight	Nickel plated
	Right angle	Tin plated

■ Ordering Information

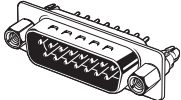
D-sub Sockets with Right-angle DIP Terminals

Appearance			
Accessories	No anchors	Anchor 2 (XM4Z-0011) M2.6 x 0.45	Anchor 2 (XM4Z-0013) #4-40 UNC
No. of contacts			
9	XM3B-0942-502L	XM3B-0942-112L	XM3B-0942-132L
15	XM3B-1542-502L	XM3B-1542-112L	XM3B-1542-132L
25	XM3B-2542-502L	XM3B-2542-112L	XM3B-2542-132L

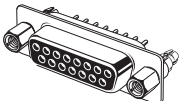
D-sub Plugs with Right-angle DIP Terminals

Appearance			
Accessories	No anchors	Anchor 2 (XM4Z-0011) M2.6 x 0.45	Anchor 2 (XM4Z-0013) #4-40 UNC
No. of contacts			
9	XM2C-0942-502L	XM2C-0942-112L	XM2C-0942-132L
15	XM2C-1542-502L	XM2C-1542-112L	XM2C-1542-132L
25	XM2C-2542-502L	XM2C-2542-112L	XM2C-2542-132L

D-sub Plugs with Straight DIP Terminals

Appearance				
Accessories	Without ground pins	No anchors	Anchor 2 (XM4Z-1011) M2.6 x 0.45	Anchor 2 (XM4Z-1013) #4-40 UNC
No. of contacts				
9	XM2E-0940-L	XM2E-0940-502L	XM2E-0940-112L	XM2E-0940-132L
15	XM2E-1540-L	XM2E-1540-502L	XM2E-1540-112L	XM2E-1540-132L
25	XM2E-2540-L	XM2E-2540-502L	XM2E-2540-112L	XM2E-2540-132L


D-sub Plugs with Straight DIP Terminals

Appearance				
Accessories	Without ground pins	No anchors	Anchor 2 (XM4Z-1011) M2.6 x 0.45	Anchor 2 (XM4Z-1013) #4-40 UNC
No. of contacts				
9	XM2E-0940-L	XM2E-0940-502L	XM2E-0940-112L	XM2E-0940-132L
15	XM2E-1540-L	XM2E-1540-502L	XM2E-1540-112L	XM2E-1540-132L
25	XM2E-2540-L	XM2E-2540-502L	XM2E-2540-112L	XM2E-2540-132L

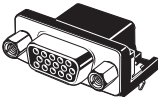
Note: For other models with Anchors, contact your OMRON representative.

D-Sub Connectors - XM3-L/XM2-L/XM4K/XM4L

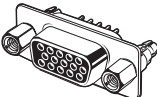
High-density D-sub Plugs with Right-angle DIP Terminals

Appearance			
Accessories	No anchors	Anchor 2 (XM4Z-0011) M2.6 x 0.45	Anchor 2 (XM4Z-0013) #4-40 UNC
No. of contacts			
15	XM4K-1542-502	XM4K-1542-112	XM4K-1542-132

High-density D-sub Sockets with Right-angle DIP Terminals







Appearance			
Accessories	No anchors	Anchor 2 (XM4Z-0011) M2.6 x 0.45	Anchor 2 (XM4Z-0013) #4-40 UNC
No. of contacts			
15	XM4L-1542-502	XM4L-1542-112	XM4L-1542-132

High-density D-sub Sockets with Right-angle DIP Terminals







Appearance			
Accessories	No anchors	Anchor 2 (XM4Z-0011) M2.6 x 0.45	Anchor 2 (XM4Z-0013) #4-40 UNC
No. of contacts			
15	XM4L-1541-501	XM4L-1541-112	XM4L-1541-132

Note: For other models with Anchors, contact your OMRON representative.

Anchor 2 (Screw Head Length: 5.8 mm)

Type	For right-angle DIP terminals			For straight DIP terminals		
Appearance						
Lock screw	M2.6 x 0.45	M3 x 0.5	#4-40 UNC	M2.6 x 0.45	M3 x 0.5	#4-40 UNC
Model	XM4Z-0021	XM4Z-0022	XM4Z-0023	XM4Z-1021	XM4Z-1022	XM4Z-1023

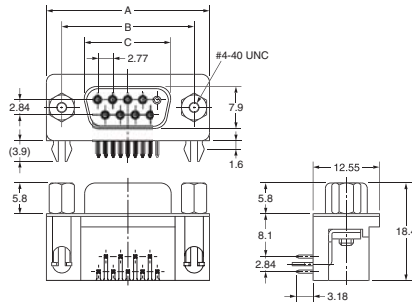
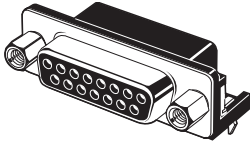
Anchor 3 (Screw Head Length: 4.8 mm)

Type	For right-angle DIP terminals			For straight DIP terminals		
Appearance						
Lock screw	M2.6 x 0.45	M3 x 0.5	#4-40 UNC	M2.6 x 0.45	M3 x 0.5	#4-40 UNC
Model	XM4Z-0021	XM4Z-0022	XM4Z-0023	XM4Z-1021	XM4Z-1022	XM4Z-1023

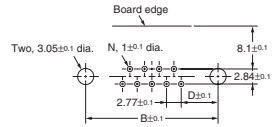
■ Dimensions

D-sub Sockets with Right-angle DIP Terminals

XM3B-0942-132L
 XM3B-1542-132L
 XM3B-2542-132L



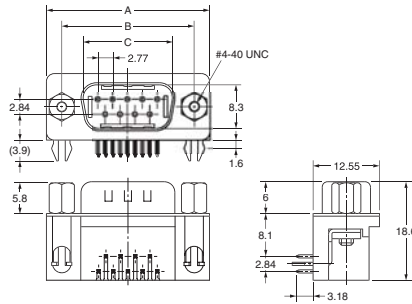
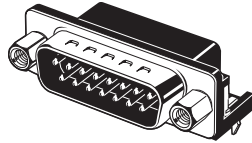
Mounting holes ($t = 1.6$ mm, bottom view)



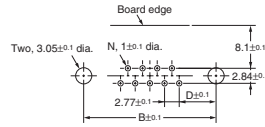
No. of contacts (N)	A	B	C	D
9	30.8	24.99	16.33	6.96
15	39.1	33.32	24.66	6.96
25	53.0	47.04	38.38	6.91

D-sub Plugs with Right-angle DIP Terminals

XM2C-0942-132L
 XM2C-1542-132L
 XM2C-2542-132L



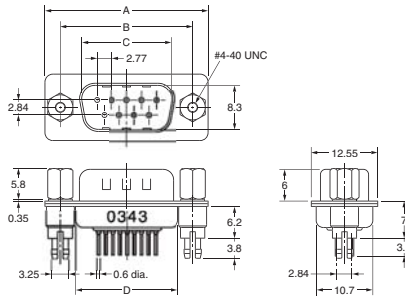
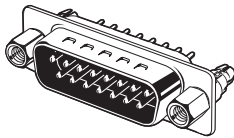
Mounting holes ($t = 1.6$ mm, bottom view)



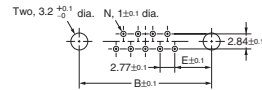
No. of contacts (N)	A	B	C	D
9	30.8	24.99	16.92	6.96
15	39.1	33.32	25.25	6.96
25	53.0	47.04	38.96	6.91

D-sub Plugs with Straight DIP Terminals

XM2E-0940-132L
 XM2E-1540-132L
 XM2E-2540-132L



Mounting holes ($t = 1.6$ mm, bottom view)

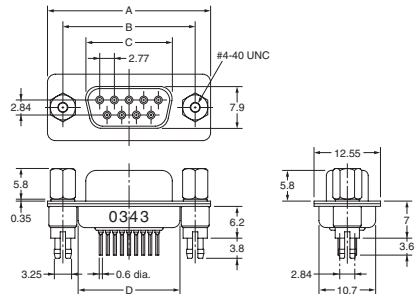
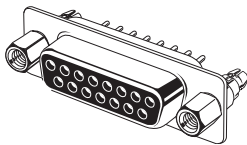


No. of contacts (N)	A	B	C	D	E
9	30.8	24.99	16.92	19.23	6.96
15	39.1	33.32	25.25	27.56	6.96
25	53.0	47.04	38.96	41.28	6.91

D-Sub Connectors - XM3-L/XM2-L/XM4K/XM4L

D-sub Sockets with Straight DIP Terminals

XM2F-0940-132L
 XM2F-1540-132L
 XM2F-2540-132L



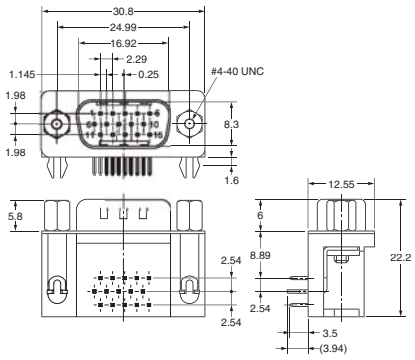
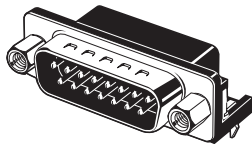
Mounting holes (t = 1.6 mm, bottom view)



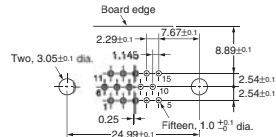
No. of contacts (N)	A	B	C	D	E
9	30.8	24.99	16.33	19.23	6.96
15	39.1	33.32	24.66	27.56	6.96
25	53.0	47.04	38.38	41.28	6.91

High-density D-sub Plugs with Right-angle DIP Terminals

XM4K-1542-132

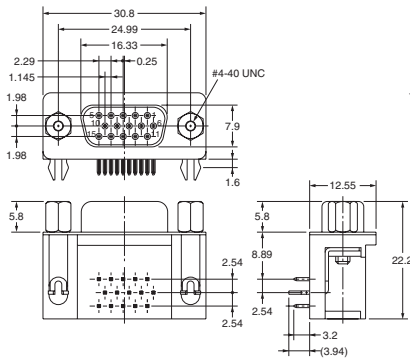
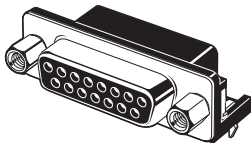


Mounting holes (t = 1.6 mm, bottom view)

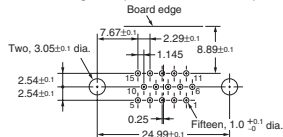


High-density D-sub Sockets with Right-angle DIP Terminals

XM4L-1542-132



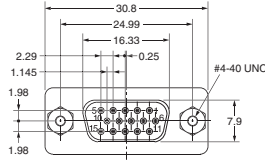
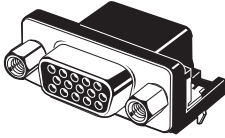
Mounting holes (t = 1.6 mm, bottom view)



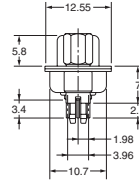
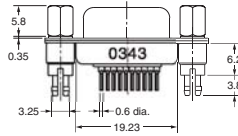
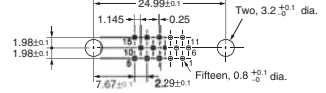
D-Sub Connectors - XM3-L/XM2-L/XM4K/XM4L

High-density D-sub Sockets with Straight DIP Terminals

XM4L-1541-132



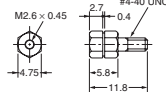
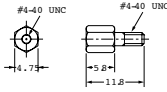
Mounting holes (t = 1.6 mm, bottom view)



Anchor 2

XM4Z-0011

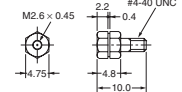
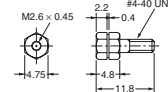
XM4Z-0011



Anchor 3

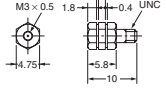
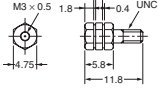
XM4Z-0021

XM4Z-0021



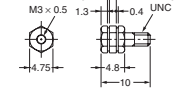
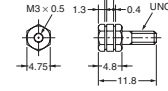
XM4Z-0012

XM4Z-0012



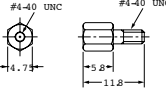
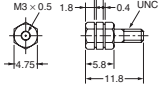
XM4Z-0022

XM4Z-0022



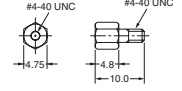
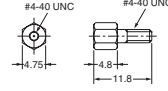
XM4Z-0013

XM4Z-0013

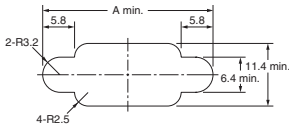


XM4Z-0023

XM4Z-0023



Dimensions: Not Panel Mounted (Using Anchor 2)



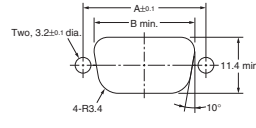
Note: 1. Two Anchors are required per Connector.

2. Applicable panel thickness is less than 1.2 mm.

No. of contacts (N)	A
9 (See note.)	31.0
15	39.4
25	53.3

Note: 1. The XM4K and XM4L use 9-contact dimensions.

Dimensions: Panel Mounted (Using Anchor 3 or M3 Screws)



Note: 1. Two Anchors are required per Connector.

2. Applicable panel thickness is less than 1.2 mm.

No. of contacts (N)	A	B
9 (See note.)	24.99	20.5
15	33.32	28.8
25	47.04	42.5

Note: 1. The XM4K and XM4L use 9-contact dimensions.

XM2S Hood Covers

■ Dimensions

9-contact Hoods

XM2S-0911

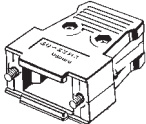
(M2.6 x 0.45 metric screws)

XM2S-0912

(M3 x 0.5 metric screws)

XM2S-0913

(#4-40 UNC inch screws)



15-, 25- and 37-contact Hoods

XM2S-@11

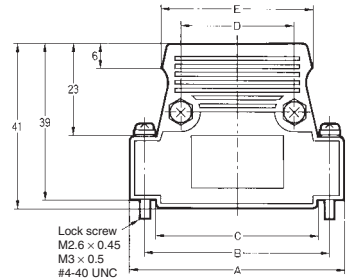
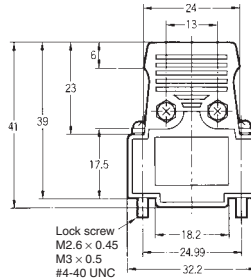
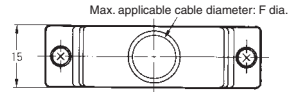
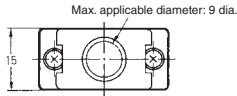
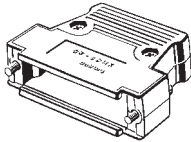
(M2.6 x 0.45 metric screws)

XM2S-@12

(M3 x 0.5 metric screws)

XM2S-@13

(#4-40 UNC inch screws)



■ Dimensions

No. of contacts	A	B	C	D	E	F
15	40.5	33.32	26.5	19	30	10
25	54.0	47.04	40	29	38	11
37	70.5	63.50	57	42	50	13

■ Ordering Information

Applicable Anchors	Lock screw	M2.6 x 0.45 metric screws	M3 x 0.5 metric screws	#4-40 UNC inch screws
	Anchor 1		XM2Z-0001	XM2Z-0002
Anchor 2		XM2Z-0011	XM2Z-0012	XM2Z-0013
Anchor 3		XM2Z-0021	XM2Z-0022	XM2Z-0023
No. of contacts				
9		XM2S-0911	XM2S-0912	XM2S-0913
15		XM2S-1511	XM2S-1512	XM2S-1513
25		XM2S-2511	XM2S-2512	XM2S-2513
37		XM2S-3711	XM2S-3712	XM2S-3713

Note: Select D-sub Connectors with Anchors or Grounding Fixtures that fit the lock screw of the Hood.

■ Accessories (Sold Separately)

Anchor 5 (For Jackscrews and XM2S Hood)

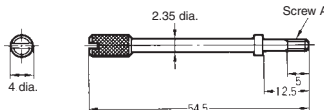
XM2Z-0071 (M2.6 x 0.45 metric screws)

XM2Z-0072 (M3 x 0.5 metric screws)

XM2Z-0073 (#4-40 UNC inch screws)



Materials and Finish
Brass/nickel plated



■ Dimensions

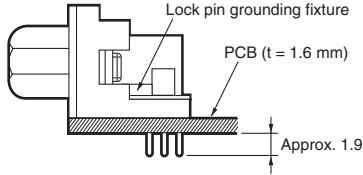
Model	A
XM2Z-0071	M2.6 x 0.45
XM2Z-0072	M3 x 0.5
XM2Z-0073	#4-40 UNC

■ Precautions

Correct Use

• Grounding (Lock Pin Grounding Fixture)

- To ground, provide copper foil around the Connector Attachment hole on the board, assemble the connector and grounding fixture, and dip in solder as shown below.
- Insert the connector into the PCB and then simultaneously dip-solder the connector terminals and lock pin to the board.



• Soldering

Automated Soldering Conditions (Jet Flow)

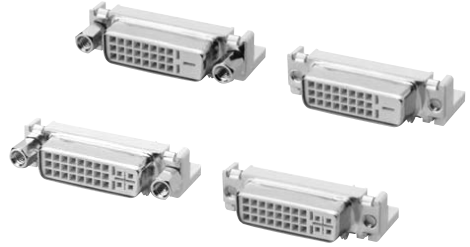
1. Soldering temperature: $250 \pm 5^\circ\text{C}$
2. Continuous soldering time: Within 5's

• Tightening Torque of Anchor and Grounding Fixture




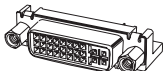
If the anchor is secured to the connector, be sure to tighten it to a torque of 0.49 N·m.

Transfer High-resolution Video Signals with OMRON's DVI-compliant Digital Visual Interface Connectors.

- Used for both digital video (TMDS) and conventional analog (RGB) signals.
- OMRON's DVI Connector is an analog interface capable of up to 2.5-GHz bandwidths.
- Transfers broadband data up to 9.9 GHz (dual link) to ensure full compatibility with advanced broadband applications.
- Shielded against EMI for high-speed data transfer.
- Digital and digital/analog models available.



Ordering Information

Type	Digital		Digital/Analog	
Accessories	No anchors	Inch screws, length = 5.8 mm	No anchors	Inch screws, length = 5.8 mm
Model	XM4M-2432-5012	XM4M-2432-1312	XM4M-2932-5012	XM4M-2932-1312
Appearance				

Note: The housing is black if the number 1 follows the model number.

Ratings and Characteristics

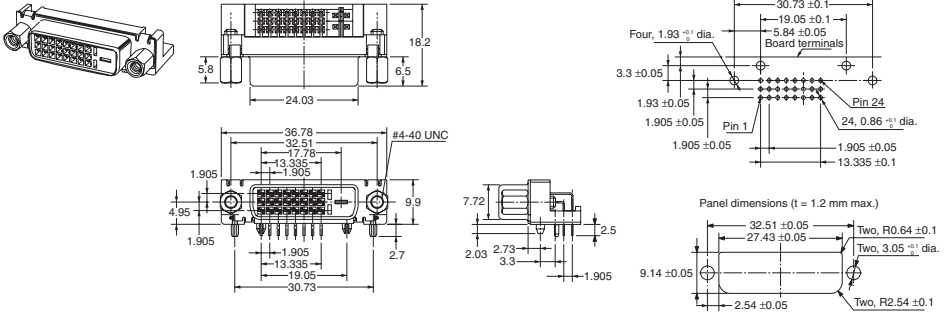
Item	Type	Digital	Digital/Analog
No. of contacts		24	29
Terminals		Right-angle DIP	
Color		Black or natural	
Rated current		1.5 A	
Rated voltage		40 V	
Contact resistance		30 m Ω max. (at 20 mVDC, 100 mA max.)	
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Withstand voltage		500 VDC for 1 min (leakage current: 1 mA max.)	
Ambient temperature		Operating: - 20 to 85°C (With no icing) Storage: - 20 to 85°C	

Materials and Finish

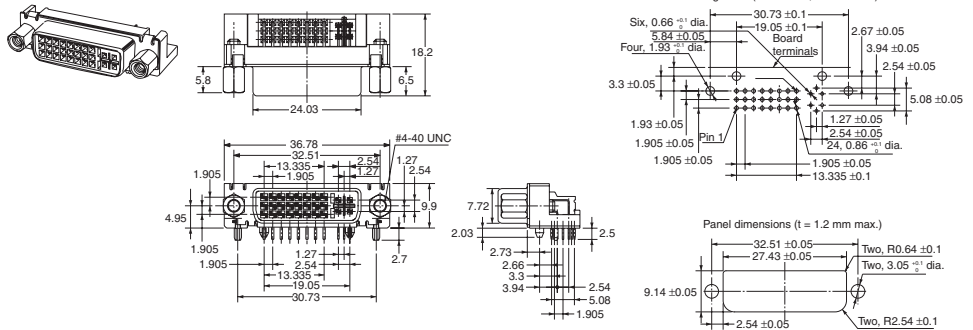
Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black or natural
Cover		Fiber-glass reinforced PBT resin (UL94V-0)/black or natural
Contact	Mating end	Copper alloy/nickel base, 0.76-μm gold plating
	Terminal	Copper alloy/nickel base, tin plating
Shell		Copper/nickel plated
Anchors		Brass/nickel plated
Grounding Fixture		Copper alloy/nickel, tin plated

■ Dimensions (Unit: mm)

XM4M-2432-1312



XM4M-2932-1312



■ Precautions

Automated Soldering

Soldering

Automated Soldering Conditions (Jet Flow)

1. Soldering temperature: 250 ±5°C
2. Continuous soldering time: Within 5 s

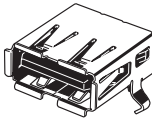
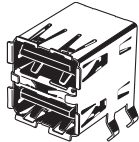
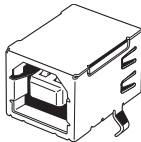
New, Compact, USB-Compliant Interface Connectors.

- Enables hot swapping so equipment can remain ON.
- Superior bend resistance during Connector insertion and removal.
- A-type Sockets connect to personal computers and USB hubs. B-type Sockets connect to a modem, scanner, mouse, or other personal computer peripheral devices.



■ Ordering Information

Sockets

Type	Single-row A-type Sockets	Double-row A-type Sockets	B Sockets
Item			
Appearance	With right-angle DIP kinked terminals 	With right-angle DIP kinked terminals 	With right-angle DIP kinked terminals 
Model	XM7A-0442	XM7A-0442-A	XM7B-0442
Order in multiples of	150	120	150

■ Ratings and Characteristics

Rated current	1 A
Rated voltage	30 VAC
Contact resistance	30 m Ω max. (at 20 mV, 100 mA max. (excluding cable conductor resistance))
Insulation resistance	1,000 M Ω min. (at 500 VDC)
Withstand voltage	750 VAC for 1 min (leakage current: 0.5 mA max.)
Connector insertion	35.3 N max.
Connector removal	10 N min.
Insertion durability	1,500 times
Ambient temperature	Operating: - 40 to 60°C (with no icing)

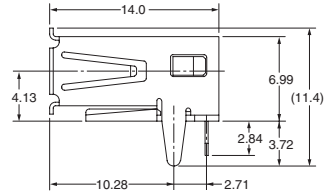
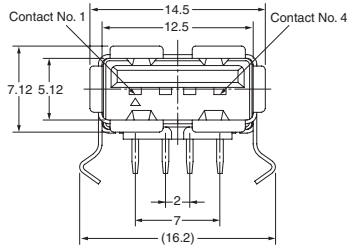
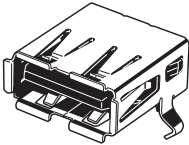
Materials and Finish

Item	Classification	Type	Sockets	
			A-type Sockets	B-type Sockets
Housing			Fiber-glass reinforced PBT resin (UL94V-0)/black	Fiber-glass reinforced PBT resin (UL94V-0)/white
Contacts	Mating end		Phosphor bronze/nickel base, 0.76-mm gold plating	
	Terminals		Phosphor bronze/nickel base, tin plated	
Shell			Phosphor bronze/tin plated	

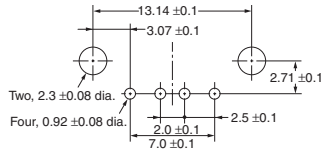
Dimensions (Unit: mm)

XM7A-0442

Single-row A-type Sockets

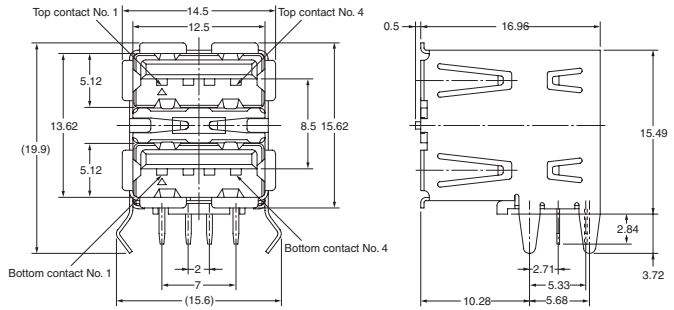
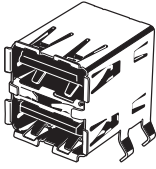


Mounting holes (t = 1.6 mm, bottom view)

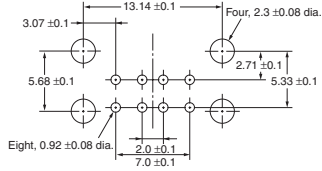


USB Connectors - XM7

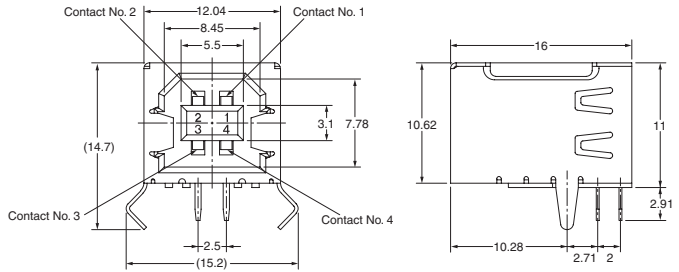
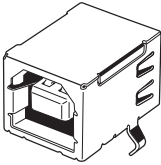
XM7A-0442-A Double-row A-type Sockets



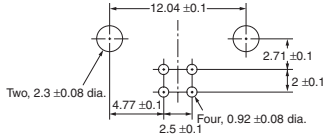
Mounting holes (t = 1.6 mm, bottom view)



XM7B-0442 B-type Sockets



Mounting holes (t = 1.6 mm, bottom view)



■ Precautions

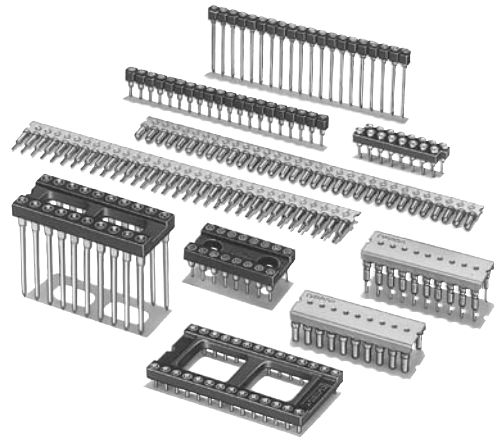
Soldering

Automated Soldering Conditions (Jet Flow)

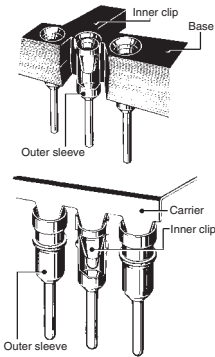
1. Soldering temperature: 250 ± 5°C
2. Continuous soldering time: Within 5 s

OMRON's IC Connectors Have Excellent Reliability and Can Tolerate Momentary Interruptions in Power. Ideal for High-speed Data Processing.

- Round pins and 4-point (4-finger) contact construction ensure long life and excellent shock and vibration durability.
- Contact entry holes are large for easy insertion.
- IC lead contacts placed high for solid connections.
- No flux rise.
- A wide product range: open-frame, closed-frame, single-row, carrier-type DIP terminals, wrap terminals, solder-sleeve terminals, and low-profile DIP terminals.
- A new tin-plated product series offers more choice when it comes to selecting the optimum IC Socket for an application.
- Conform to UL standards (file no. E 103202) and CSA standards (file no. LR 62678).

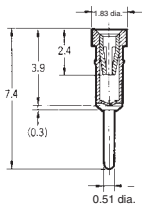


■ Construction

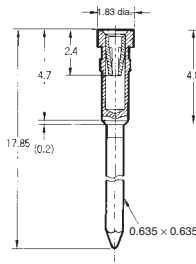


■ Contact Dimensions

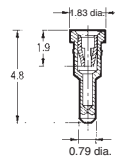
DIP Terminals



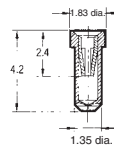
Wrap Terminals



Low-profile DIP Terminals



Solder-sleeve Terminals



■ Ratings and Characteristics

Item	Gold plated	Gold flash plated
Rated current	1 A	
Rated voltage	300 VAC	
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)	
Contact insertion (See note.)	3.92 N max.	
Contact removal (See note.)	0.64 N min. with gold plating, 0.64 N min. with solder plating	
Insertion durability	100 times (0.75-μm gold plating), 50 times (0.25-μm gold plating)	20 times
Ambient temperature	Operating: - 55 to 125°C (with no icing)	

Note: The contact insertion force and contact removal force are for a test gauge, t = 0.432 mm.

■ Materials and Finish

Base	Fiber-glass reinforced PBT resin (UL94V-0)/black
Carrier	Aluminum
Inner clip	Beryllium copper/nickel base, gold plated
Outer sleeve	Brass/nickel base, gold flash plating

Note: For non-standard plating, contact your OMRON representative.

■ Applicable Wrap Post Wire Sizes

AWG30, AWG28, AWG26, AWG24
(Solid wire: 0.25 to 0.51 mm dia.)

■ Wrap Post Length

3 wires

■ Applicable IC Lead Dimensions

DIP, Wrap, and Solder-sleeve Terminals

	Depth x width (mm)	
Flat lead	0.29 ±0.09 x 0.46 ±0.08 (See note.)	
Round lead	0.53 dia. max.	0.41 dia. min.

Note: Do not use wire where the diagonal is more than 0.56 mm.

■ Low-profile DIP Terminals

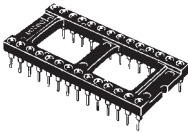
	Depth x width (mm)	
Flat lead	0.29 ±0.09 x 0.46 ±0.08 (See note.)	
Round lead	0.50 dia. max.	0.41 dia. min.

Note: Do not use wire where the diagonal is more than 0.52 mm.

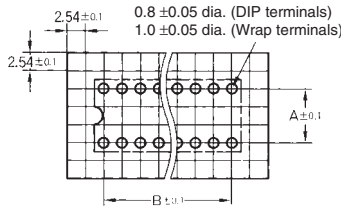
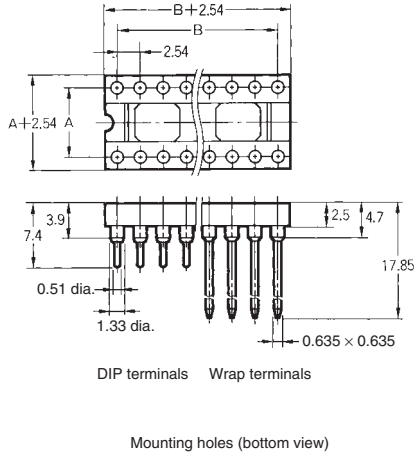
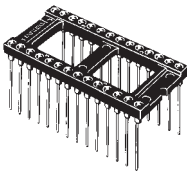
XR2A Open-frame Sockets

■ Dimensions

XR2A-□□11-N
 XR2A-2463-N
 XR2A-2473-N
 XR2A-□□01-N
 XR2A-2461-N
 XR2A-2471-N
 XR2A-□□21-N
 XR2A-2467-N
 XR2A-2477-N
 (With DIP terminals)



XR2A-□□02
 (With wrap terminals)

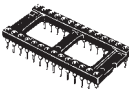
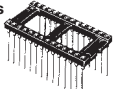


Dimensions

No. of contacts	Dimensions (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 (See note 1.)	15.24	27.94
24 (See note 2.)	10.16	27.94
24 (See note 3.)	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.** XR2A-2401-N/XR2A-2402/
 XR2A-2411N/XR2A-2421-N
- 2.** XR2A-2461-N/XR2A-2463-N/XR2A-2467-N
- 3.** XR2A-2471-N/XR2A-2473-N/XR2A-2477-N

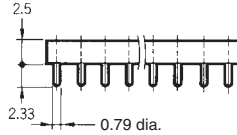
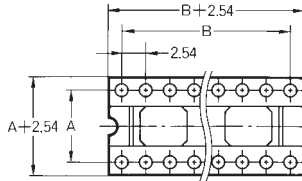
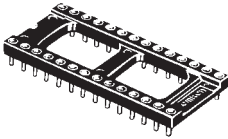
■ Ordering Information

Appearance		Sockets with DIP terminals			Sockets with wrap terminals
No of contacts	Row pitch (A) (mm)				
		With 0.25- μ m gold plating	With 0.75- μ m gold plating	With gold flash plating	With 0.75- μ m gold plating
8	7.62	XR2A-0811-N	XR2A-0801-N	XR2A-0821-N	XR2A-0802
14	7.62	XR2A-1411-N	XR2A-1401-N	XR2A-1421-N	XR2A-1402
16	7.62	XR2A-1611-N	XR2A-1601-N	XR2A-1621-N	XR2A-1602
18	7.62	XR2A-1811-N	XR2A-1801-N	XR2A-1821-N	XR2A-1802
20	7.62	XR2A-2011-N	XR2A-2001-N	XR2A-2021-N	XR2A-2002
22	10.16	XR2A-2211-N	XR2A-2201-N	XR2A-2221-N	XR2A-2202
24	15.24	XR2A-2411-N	XR2A-2401-N	XR2A-2421-N	XR2A-2402
24	10.16	XR2A-2463-N	XR2A-2461-N	XR2A-2467-N	---
24	7.62	XR2A-2473-N	XR2A-2471-N	XR2A-2477-N	XR2A-2472
28	15.24	XR2A-2811-N	XR2A-2801-N	XR2A-2821-N	XR2A-2802
32	15.24	XR2A-3211-N	XR2A-3201-N	XR2A-3221-N	XR2A-3202
40	15.24	XR2A-4011-N	XR2A-4001-N	XR2A-4021-N	XR2A-4002
42	15.24	XR2A-4211-N	XR2A-4201-N	XR2A-4221-N	XR2A-4202
48	15.24	XR2A-4811-N	XR2A-4801-N	---	XR2A-4802
50	22.86	XR2A-5011-N	XR2A-5001-N	---	---
64	22.86	XR2A-6411-N	XR2A-6401-N	---	XR2A-6402

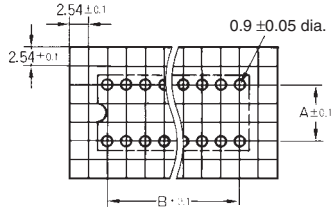
XR2A Open-frame Sockets (with Low-profile DIP Terminals)

■ Dimensions

- XR2A-□□15
 - XR2A-2466
 - XR2A-2476
 - XR2A-□□05
 - XR2A-2465
 - XR2A-2475
 - XR2A-□□25
 - XR2A-2468
 - XR2A-2478
- (With low-profile DIP terminals)



Mounting holes (bottom view)



Dimensions

No. of contacts	Dimensions (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 (See note 1.)	15.24	27.94
24 (See note 2.)	10.16	27.94
24 (See note 3.)	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
64	22.86	78.74

- Note:**
1. XR2A-2415/XR2A-2405/XR2A-2425
 2. XR2A-2466/XR2A-2465/XR2A-2468
 3. XR2A-2476/XR2A-2475/XR2A-2478

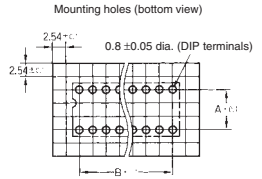
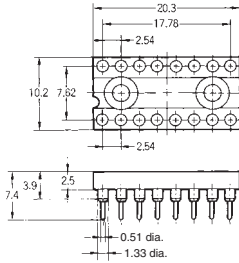
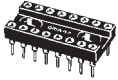
■ Ordering Information

Appearance		Sockets with DIP terminals		
No of contacts	Row pitch (A) (mm)			
		With 0.25- μ m gold plating	With 0.75- μ m gold plating	With gold flash plating
8	7.62	XR2A-0815	XR2A-0805	XR2A-0825
14	7.62	XR2A-1415	XR2A-1405	XR2A-1425
16	7.62	XR2A-1615	XR2A-1605	XR2A-1625
18	7.62	XR2A-1815	XR2A-1805	XR2A-1825
20	7.62	XR2A-2015	XR2A-2005	XR2A-2025
22	10.16	XR2A-2215	XR2A-2205	XR2A-2225
24	15.24	XR2A-2415	XR2A-2405	XR2A-2425
24	10.16	XR2A-2466	XR2A-2465	XR2A-2468
24	7.62	XR2A-2476	XR2A-2475	XR2A-2478
28	15.24	XR2A-2815	XR2A-2805	XR2A-2825
32	15.24	XR2A-3215	XR2A-3205	XR2A-3225
40	15.24	XR2A-4015	XR2A-4005	XR2A-4025
42	15.24	XR2A-4215	XR2A-4205	---
48	15.24	XR2A-4815	XR2A-4805	---
64	22.86	XR2A-6415	XR2A-6405	---

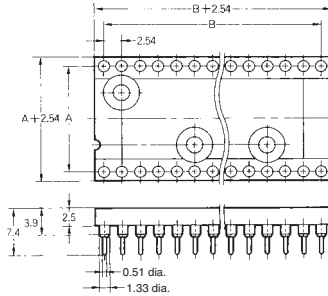
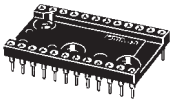
XR2B Closed-frame Sockets

■ Dimensions

XR2B-1611-N
XR2B-1601-N



XR2B-□□11-N
XR2B-□□01-N

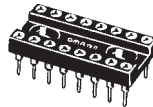


Dimensions

No. of contacts	Dimensions (mm)	
	A	B
16	7.62	17.78
24	15.24	27.94
28	15.24	33.02
32	15.24	38.10
40	15.24	48.26

■ Ordering Information

Appearance		Sockets with DIP terminals	
No of contacts	Row pitch (A) (mm)	With 0.25-μm gold plating	With 0.75-μm gold plating
16	7.62	XR2B-1611-N	XR2B-1601-N
24	15.24	XR2B-2411-N	XR2B-2401-N
28	15.24	XR2B-2811-N	XR2B-2801-N
32	15.24	XR2B-3211-N	XR2B-3201-N
40	15.24	XR2B-4011-N	XR2B-4001-N

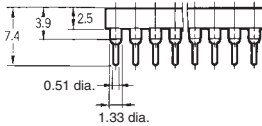
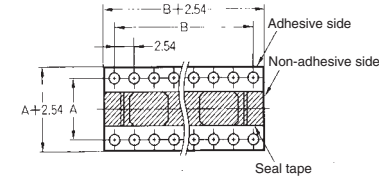
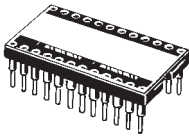


XR2T Open-frame Sockets with Seal Tape

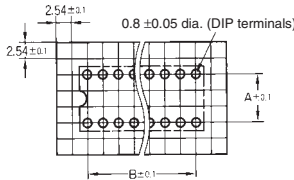
- Equipped with seal tape to prevent flux cleaning liquids from entering the Socket.
- The same round-pin, 4-point contact structure as the RX2A is used for the contacts.
- The seal tape is made of transparent polyethylene (adhesive portion) and yellow polypropolyene (non-adhesive portion).

■ Dimensions

XR2T-□□11-N
 XR2T-2463-N
 XR2T-2473-N
 XR2T-□□01-N
 XR2T-2461-N
 XR2T-2471-N
 XR2T-□□21-N
 XR2T-2467-N
 XR2T-2477-N



Mounting holes (bottom view)



Dimensions

No. of contacts	Dimensions (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 (See note 1.)	15.24	27.94
24 (See note 2.)	10.16	27.94
24 (See note 3.)	7.62	27.94
28	15.24	33.02
32	15.24	38.10
40	15.24	48.26
48	15.24	58.42

- Note:** 1. XR2T-2411-N/XR2T-2401-N/XR2A-2421-N
 2. XR2T-2463-N/XR2T-2461-N/XR2T-2467-N
 3. XR2T-2473-N/XR2T-2471-N/XR2T-2477-N

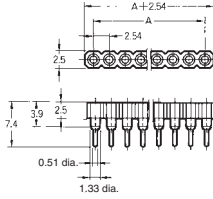
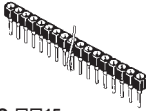
■ Ordering Information

Appearance		Sockets with DIP terminals		
No of contacts	Row pitch (A) (mm)			
		With 0.25- μ m gold plating	With 0.75- μ m gold plating	With gold flash plating
8	7.62	XR2T-0811-N	XR2T-0801-N	XR2T-0821-N
14	7.62	XR2T-1411-N	XR2T-1401-N	XR2T-1421-N
16	7.62	XR2T-1611-N	XR2T-1601-N	XR2T-1621-N
18	7.62	XR2T-1811-N	XR2T-1801-N	XR2T-1821-N
20	7.62	XR2T-2011-N	XR2T-2001-N	XR2T-2021-N
22	10.16	XR2T-2211-N	XR2T-2201-N	XR2T-2221-N
24	15.24	XR2T-2411-N	XR2T-2401-N	XR2T-2421-N
24	10.16	XR2T-2463-N	XR2T-2461-N	XR2T-2467-N
24	7.62	XR2T-2473-N	XR2T-2471-N	XR2T-2477-N
28	15.24	XR2T-2811-N	XR2T-2801-N	XR2T-2821-N
32	15.24	XR2T-3211-N	XR2T-3201-N	XR2T-3221-N
40	15.24	XR2T-4011-N	XR2T-4001-N	XR2T-4021-N
48	15.24	XR2T-4811-N	XR2T-4801-N	---

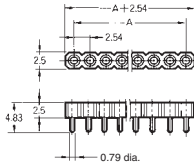
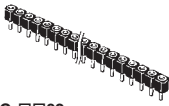
XR2C Single-row Sockets

■ Dimensions

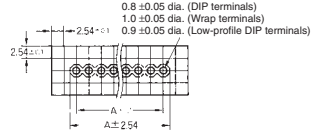
XR2C-□□11-N
 XR2C-□□01-N
 XR2C-□□21-N
 (With DIP terminals)



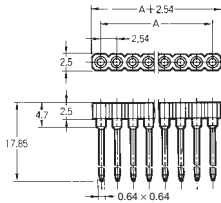
XR2C-□□15
 XR2C-□□05
 XR2C-□□25
 (With low-profile DIP terminals)



Mounting holes (bottom view)



XR2C-□□02
 (With wrap terminals)



Dimensions

No. of contacts	A (mm)
20	48.26
32	78.74

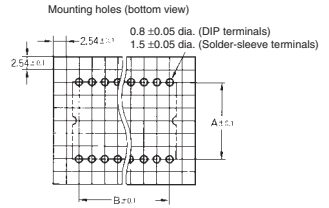
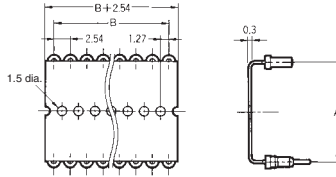
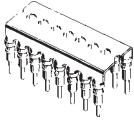
■ Ordering Information

Appearance	No. of contacts	With 0.25-μm gold plating	With 0.75-μm gold plating	With gold flash plating
Sockets with DIP terminals 	10	XR2C-1011-N	---	---
	16	XR2C-1611-N	---	---
	20	XR2C-2011-N	XR2C-2001-N	XR2C-2021-N
	32	XR2C-3211-N	XR2C-3201-N	XR2C-3221-N
Sockets with low-profile DIP terminals 	20	XR2C-2015	XR2C-2005	XR2C-2025
	32	XR2C-3215	XR2C-3205	XR2C-3225
Sockets with wrap terminals 	20	---	XR2C-2002	---
	32	---	XR2C-3202	---

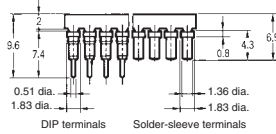
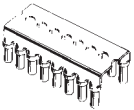
XR2D Double-row Carrier Sockets

■ Dimensions

XR2D-□□01-N
(With DIP terminals)



XR2D-□□04
(With solder-sleeve terminals)



Dimensions

No. of contacts	Dimensions (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
24	15.24	27.94
28	15.24	33.02
32	15.24	38.10
40	15.24	48.26

■ Ordering Information

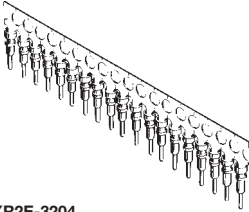
Appearance		Sockets with DIP terminals	Sockets with solder-sleeve terminals
No of contacts	Row pitch (A) (mm)	With 0.75- μ m gold plating	
8	7.62	XR2D-0801-N	XR2D-0804
14	7.62	XR2D-1401-N	XR2D-1404
16	7.62	XR2D-1601-N	XR2D-1604
18	7.62	XR2D-1801-N	XR2D-1804
20	7.62	XR2D-2001-N	XR2D-2004
24	15.24	XR2D-2401-N	XR2D-2404
28	15.24	XR2D-2801-N	XR2D-2804
32	15.24	XR2D-3201-N	XR2D-3204
40	15.24	XR2D-4001-N	XR2D-4004

XR2E Single-row Carrier Sockets

■ **Dimensions**

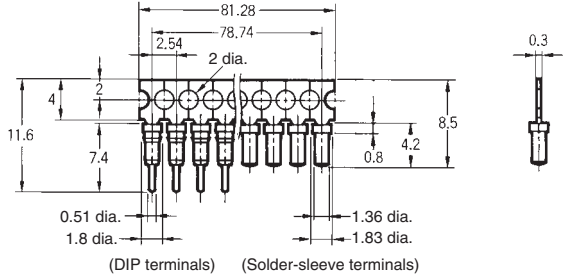
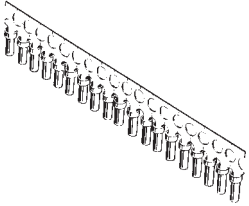
XR2E-3201-N

(With DIP terminals)

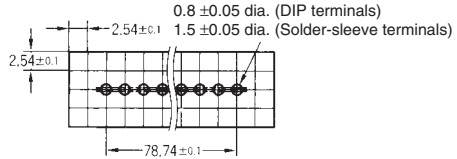


XR2E-3204

(With solder-sleeve terminals)



Mounting holes (bottom view)



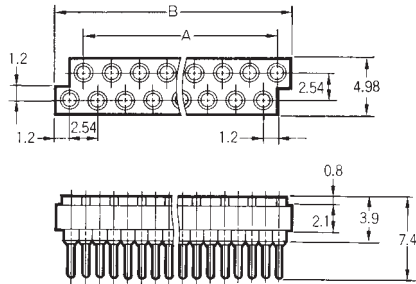
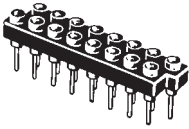
■ **Ordering Information**

Appearance	Sockets with DIP terminals	Sockets with solder-sleeve terminals
No. of contacts	With 0.75-µm gold plating	With 0.75-µm gold plating
32	XR2E-3201-N	XR2E-3204

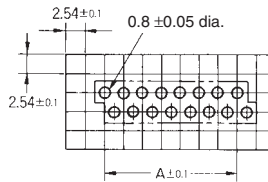
XR2H ZIP (Zigzag) Sockets

■ Dimensions

XR2H-□□11-N
(With DIP terminals)



Mounting holes (bottom view)



Dimensions

No. of contacts	Dimensions (mm)	
	A	B
16	17.78	21.5
20	22.86	26.5
24	27.94	31.6
28	33.02	36.7

■ Ordering Information

Appearance	Sockets with DIP terminals
No. of contacts	With 0.25-μm gold plating
16	XR2H-1611-N
20	XR2H-2011-N
24	XR2H-2411-N
28	XR2H-2811-N

XR2P Single-row Round Pin Plugs Single-row Round Pins for Low-profile Stacking

- Single row with 2.54mm pitch.
- Low profile stacking possible in combination with Single-row IC Sockets (XR2C).
- Easily divided into the desired number of contacts.

■ Ratings and Characteristics

Rated current	1 A
Rated voltage	300 VAC
Contact resistance (See note.)	20 mΩ max. (at 20 mV, 10 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)
Ambient operating temperature	- 55 to 125°C (with no icing at low temperature)

Note: The contact and vibration resistance are the values when the Plug is mated with an XR2C.

■ Materials and Finish

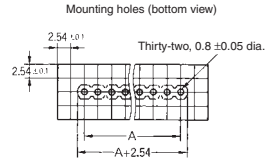
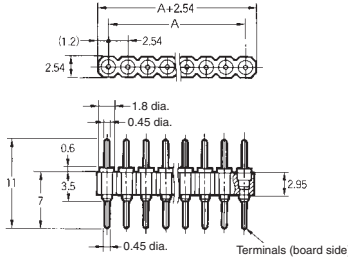
Base	Fiber-glass reinforced PBT resin (UL94V-0)/black	
Contacts	Mating end	Brass/nickel base with 0.25-mm gold plating
	Terminal	

■ Applicable Sockets

XR2C-□□11-N	IC Sockets (single row)
XR2C-3215	IC Socket (single row, low profile)

■ Dimensions

XR2P-□□41
(With DIP straight terminals)



Mounting holes (bottom view)

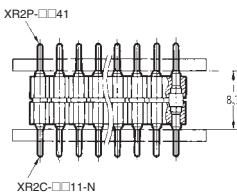
No. of contacts	A (mm)
10	22.86
16	38.1
20	48.26
32	78.74

Ordering Information

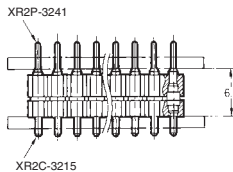
No. of contacts	Model
10	XR2P-1041
16	XR2P-1641
20	XR2P-2041
32	XR2P-3241

■ Mated Dimensions

XR2P-□□41 with XR2C-□□11-N
Single-row IC Socket



XR2P-3241 with XR2C-3215
Single-row Low-profile IC Socket



XR2P-3241 with XR2E-3204
Single-row Carrier Socket with Solder-sleeve Terminals

