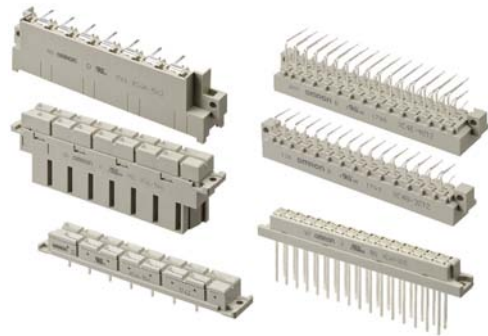# XC4

DIN Medium/High-Current Connectors

Medium/High-Current Connectors Conform to DIN Standards.

- DIN 41612 compliance ensures full interchangeability.
- Sufficient creepage distance for medium/high-current and high-voltage circuit applications.

Connectors

Model	XC4A/B	XC4E/F	XC4G/H	XC4K/L
DIN connector type	F	E	D	H
Appearance				
Page	3 to 4	5 to 6	7 to 8	9 to 11

Model Number Structure

XC4☐-☐☐ ☐ ☐
   (1) (2) (3)(4)

(1) Type
- A : DIN F-type Plugs
- B : DIN F-type Sockets
- E : DIN E-type Plugs
- F : DIN E-type Sockets
- G : DIN D-type Plugs
- H : DIN D-type Sockets
- K : DIN H-type Plugs
- L : DIN H-type Sockets

(2) No. of contacts
- 15 : 15 contacts
- 32 : 32 contacts
- 48 : 48 contacts

(3) Metal plating specifications of plugs
- 1 : Gold palladium plating
- 4 : Silver plating

(4) Terminal type
- 1 : Straight DIP terminals
- 2 : Right-angle DIP terminals
- 3 : Straight wrap terminals
- 6 : Faston tab terminals

Ratings and Characteristics

Item Model	XC4A/B	XC4E/F	XC4G/H	XC4K/L	Remarks
Rated current	6 A			15 A	2 A
Rated voltage	380 VAC	500 VAC			300 VAC
Contact resistance	15 mΩ max.			8 mΩ max.	At 20 mV, 100 mA max.
Insulation resistance	10^6 MΩ min.				At 100 VDC
Dielectric strength	1,550 VAC			3,100 VAC	1 min (leakage current: 1 mA max.)
Total insertion force	74 N	1.23 N per contact	39.2 N	88 N	Max. value
Removal force	0.20 N	0.15 N	0.20 N		Min. value with a test gauge
Insertion durability	400 times				
Ambient operating temperature	−55 to 125°C				With no icing at low temperature

Materials and Finish

Model	Item	Category	Plugs/Sockets
XC4A-4812	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Brass/nickel base, gold palladium plating
		Sockets	Brass/nickel base, tin plating
XC4B-4811	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze nickel base, gold palladium plating
		Sockets	Phosphor bronze/nickel base, tin plating
XC4B-4813	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze nickel base, gold palladium plating
		Sockets	Phosphor bronze/tin plating
XC4E-3212	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Brass/nickel base, gold palladium plating
		Sockets	Brass/nickel base, tin plating
XC4E-4812	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Brass/nickel base, gold palladium plating
		Sockets	Brass/nickel base, tin plating
XC4F-3213	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PC resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze nickel base, gold palladium plating
		Sockets	Phosphor bronze/tin plating
XC4F-4813	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PC resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze nickel base, gold palladium plating
		Sockets	Phosphor bronze/tin plating
XC4G-3212	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Brass/nickel base, gold palladium plating
		Sockets	Brass/nickel base, tin plating
XC4H-3213	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PC resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze nickel base, gold palladium plating
		Sockets	Phosphor bronze/tin plating
XC4K-1542	Housings		Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Brass/nickel base, silver plating
		Sockets	Brass/nickel base, silver plating (spare solder available at the tip of the terminal)
XC4L-1541	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze/silver plating
		Sockets	Phosphor bronze/nickel base, tin plating
XC4L-1546	Housings	Mating section	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
		Contact holders	Fiber-glass reinforced PBT resin (UL94 V-0)/gray
	Contacts	Plugs	Phosphor bronze/silver plating
		Sockets	Phosphor bronze/silver plating

Applicable Wrap Post Wire Sizes

AWG26, AWG24, AWG22, or AWG20
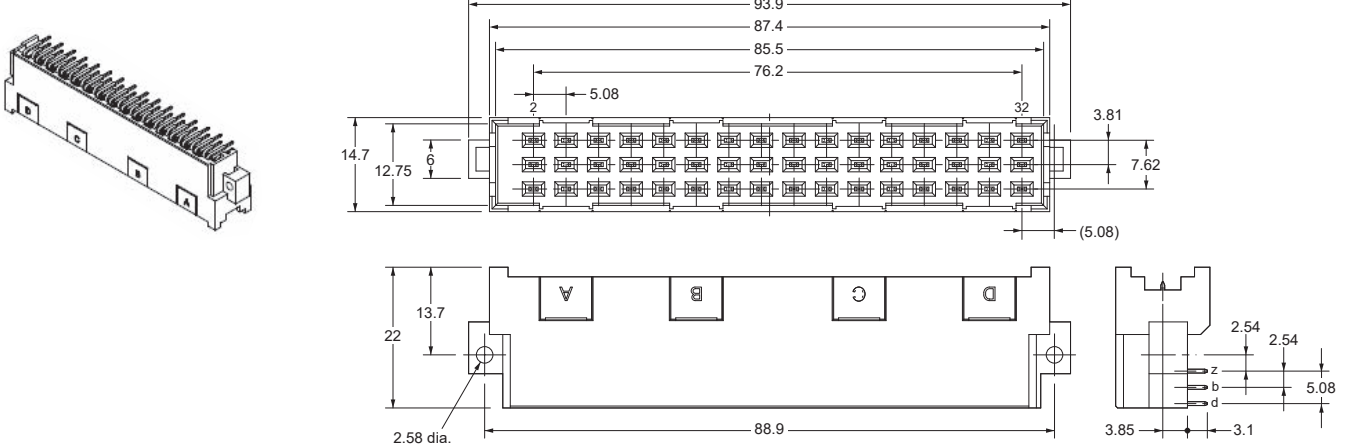(Solid wire: 0.40 to 0.80 mm dia.)
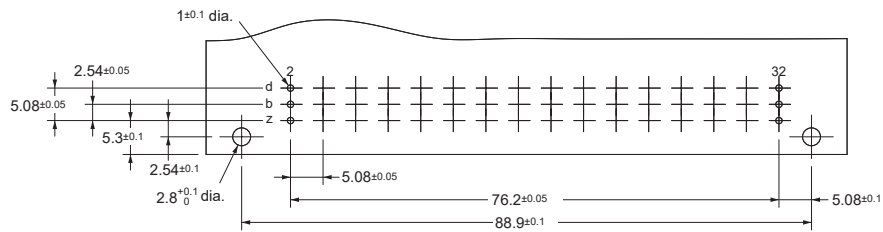
Wrap Post Length

3 wires

XC4A DIN F-type Plugs

Dimensions
(unit: mm)

XC4A-4812
(With right-angle DIP terminals)

Mounting holes
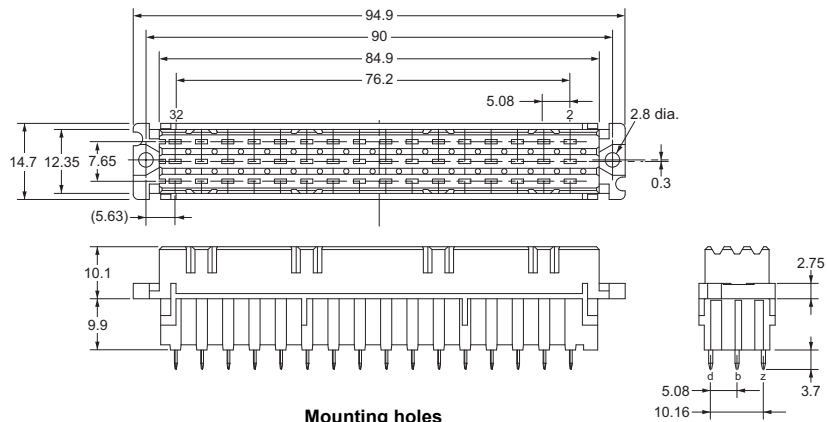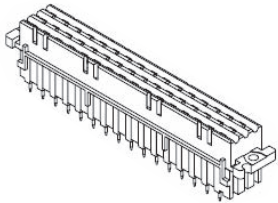**(Bottom View)**

Ordering Information

No. of contacts	Terminal type	Model
48	Right-angle DIP terminals	**XC4A-4812**

XC4B DIN F-type Sockets

Dimensions

XC4B-4811
(With straight DIP terminals)

94.9
90
84.9
76.2
5.08
2
2.8 dia.
32
14.7 12.35 7.65
(5.63)
0.3
10.1
9.9
2.75
d b z
5.08
3.7
10.16

Mounting holes
(Bottom View)

1±0.1 dia.
2.8 +0.1/0 dia.
5.08±0.05
32
2
d
10.16±0.05
b
z
0.3
5.63±0.1
5.08±0.05
76.2±0.05
90±0.1

XC4B-4813
(With straight wrap terminals)

94.8
90
84.9
76.2
5.08
7.82
0.3
14.75 12.4
2.8 dia.
9.9
10
21.96
□1
5.08
84.5
10.16

Mounting holes
(Bottom View)

1.5±0.1 dia.
2.8 +0.1/0 dia.
5.08±0.05
32
2
d
10.16±0.05
b
z
0.3±0.05
5.63±0.1
5.08±0.05
76.2±0.05
90±0.1

Panel dimensions
(Top View)

2.8 +0.1/0 dia.
z
15 min.
d
7.8±0.1
85.1±0.1
90±0.1
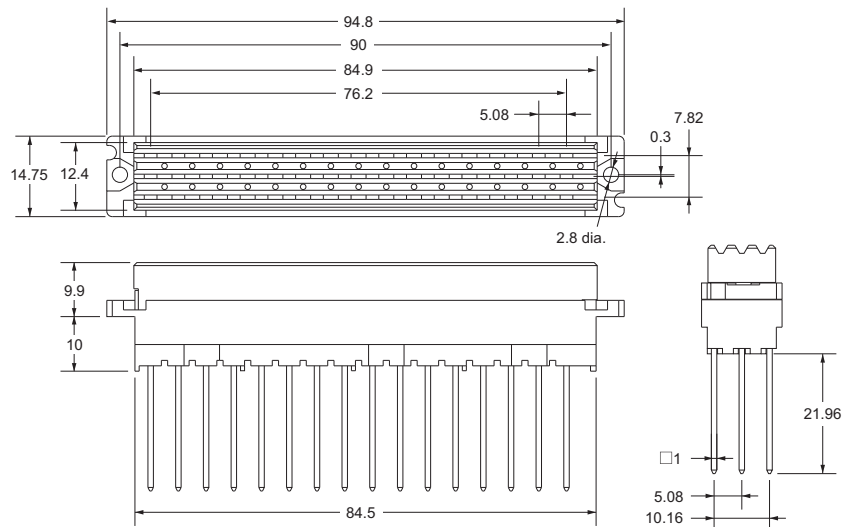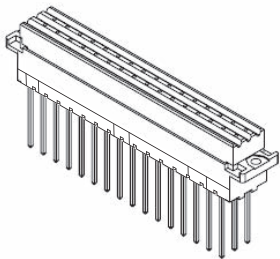
Ordering Information

No. of contacts	Terminal type	Model
48	Straight DIP terminals	**XC4B-4811**
	Straight wrap terminals	**XC4B-4813**

XC4E DIN E-type Plugs

Dimensions

(unit: mm)

XC4E-4812
XC4E-3212
(With right-angle DIP terminals)
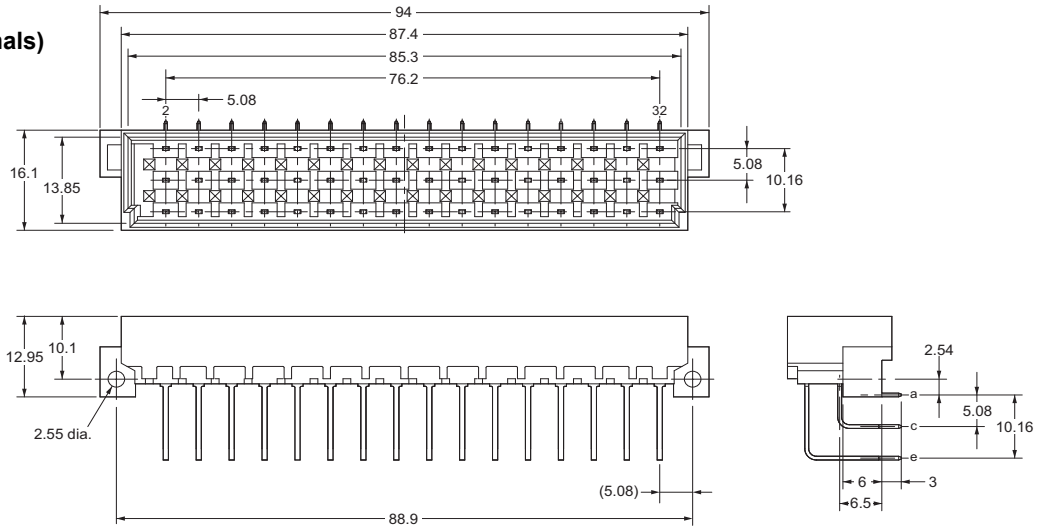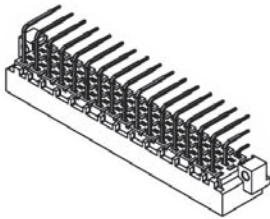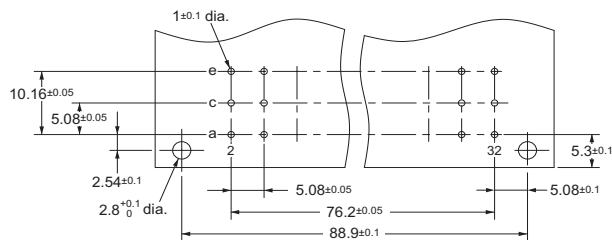
Mounting holes
(Bottom View)

Note: The mounting holes in the above diagrams are for the 48-contact Plug.
The 32-contact Plug does not have the center row (C in the above diagrams).

Ordering Information

No. of contacts	Terminal type	Model
48	Right-angle DIP terminals	**XC4E-4812**
32 ✶	Right-angle DIP terminals	**XC4E-3212**

✶ Has no center row (row b).

XC4F DIN E-type Sockets

Dimensions

(unit: mm)

XC4F-4813
XC4F-3213
(With straight wrap terminals)
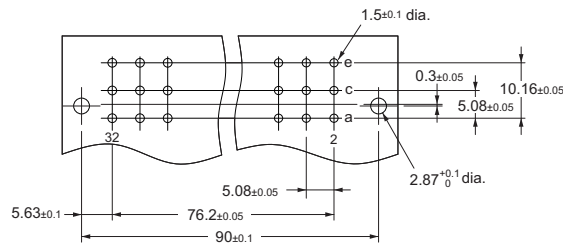
94.9
90
84.95
76.2
5.08
2
32
0.3
15.6 13.57
5.08
10.16
(5.63)
2.87 dia.

11.5

2.75
20.1
e c a
5.08
10.16

Mounting holes
(Bottom View)

1.5±0.1 dia.
e
0.3±0.05
10.16±0.05
c
5.08±0.05
a
32
2
2.87 +0.1/0 dia.
5.08±0.05
5.63±0.1
76.2±0.05
90±0.1

Note: The mounting holes in the above diagrams are for the 48-contact Plug.
The 32-contact Plug does not have the center row (C in the above diagrams).

Ordering Information

No. of contacts	Terminal type	Model
48	Straight wrap terminals	**XC4F-4813**
32 ✽	Straight wrap terminals	**XC4F-3213**

✽ Has no center row (row b).

XC4G DIN D-type Plugs

Dimensions

XC4G-3212
(With right-angle DIP terminals)
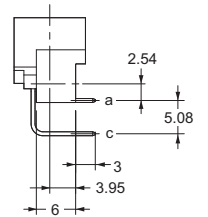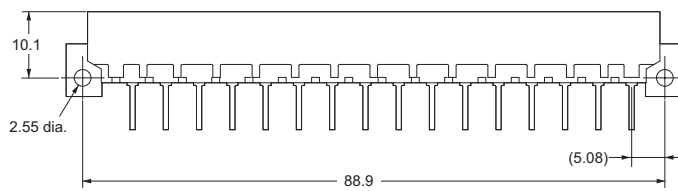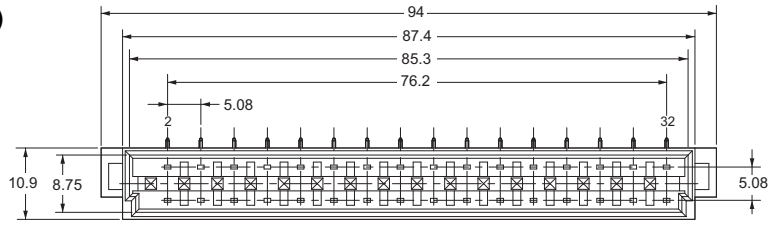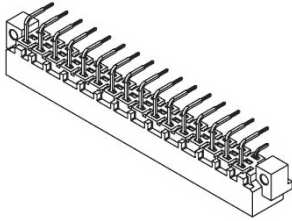
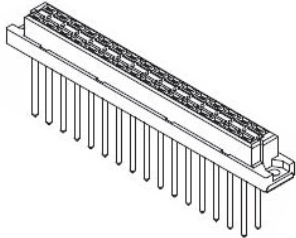**Mounting holes**
(Bottom View)
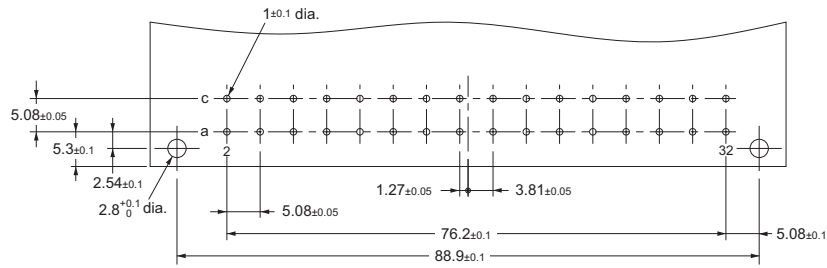
Ordering Information

No. of contacts	Terminal type	Model
32	Right-angle DIP terminals	**XC4G-3212**

XC4H DIN D-type Sockets

Dimensions

(unit: mm)

XC4H-3213
(With straight wrap terminals)
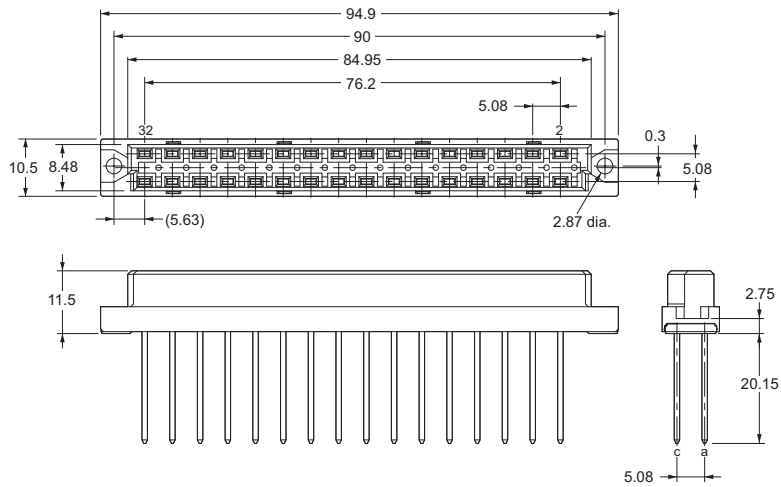
Mounting holes
(Bottom View)
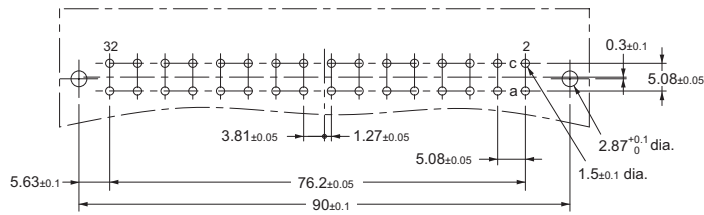
Panel dimensions
(Top View)
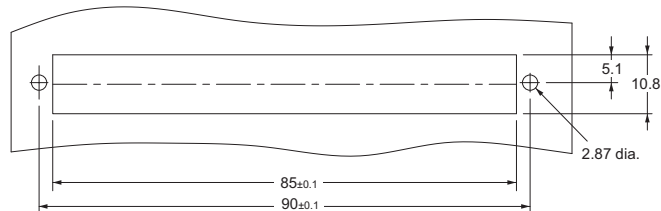
Ordering Information

No. of contacts	Terminal type	Model
32	Straight wrap terminals	**XC4H-3213**

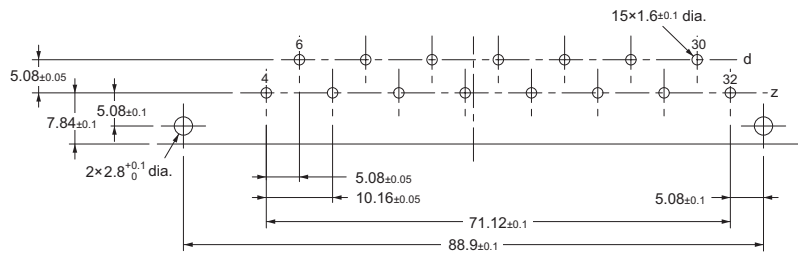# XC4K DIN H-type Plugs

Dimensions

(unit: mm)

XC4K-1542
(With right-angle DIP terminals)
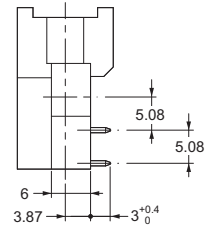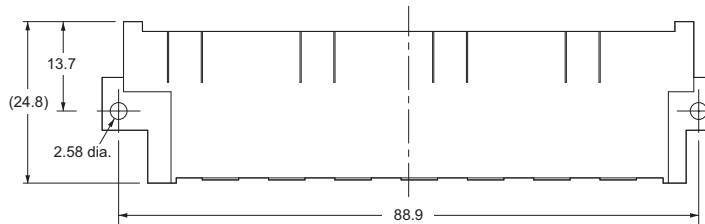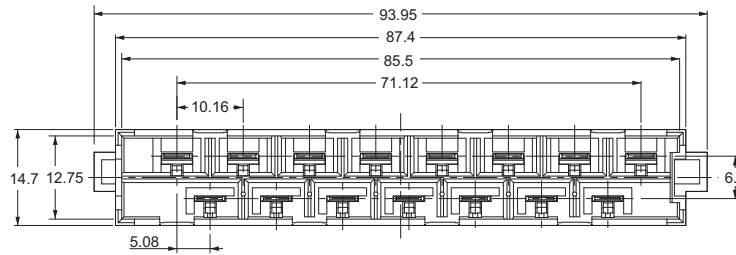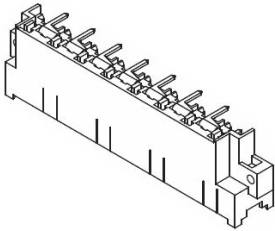
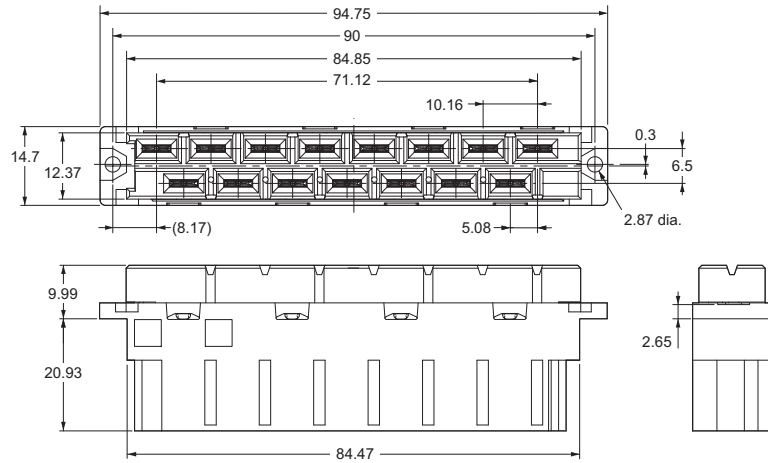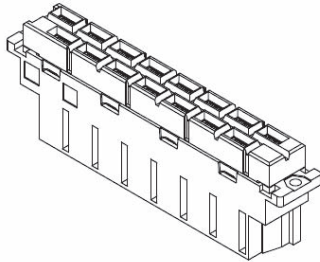**Mounting holes
(Bottom View)**

Ordering Information

No. of contacts	Terminal type	Model
15	Right-angle DIP terminals	**XC4K-1542**

XC4L DIN H-type Sockets, Faston Tab Terminals

Dimensions

(unit: mm)

XC4L-1546
(With Faston tab terminals)

Panel dimensions
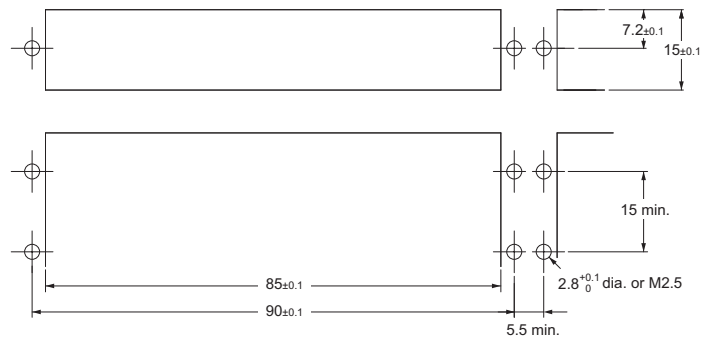
Ordering Information

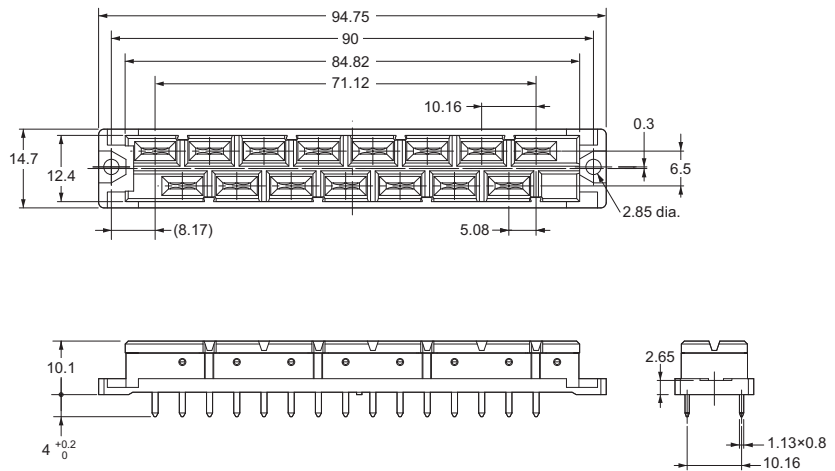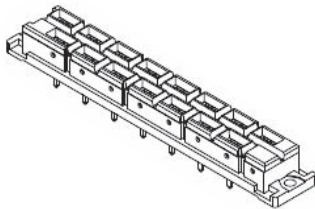| No. of contacts	Terminal type	Model
15	Faston tab terminals (See note.)	XC4L-1546

Note: The applicable contact is a #250 Faston receptacle.

XC4L DIN H-type Sockets, Straight DIP Terminals
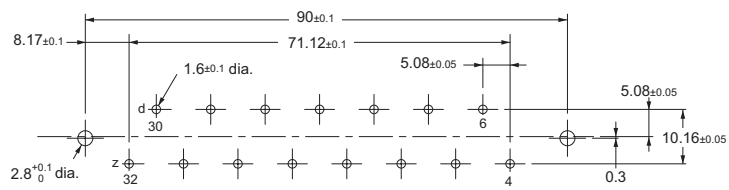
Dimensions

(unit: mm)

**XC4L-1541
(With straight DIP terminals)**

**Mounting holes
(Bottom View)**

Ordering Information

No. of contacts	Terminal type	Model
15	Straight DIP terminals	**XC4L-1541**

Mating diagrams

(unit: mm)

Model	XC4A/B	XC4E/F
DIN connector type	F	E
Mating diagrams		

Model	XC4G/H	XC4K/L
DIN connector type	D	H
Mating diagrams		

Precautions

Correct Use

● **Automated Soldering**

• Use tape to mask Right-angle Connectors before automated soldering.

Masking tape
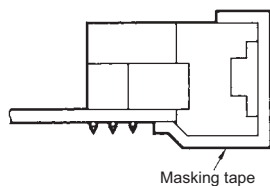
● **Automated Soldering Conditions (Jet Flow)**

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

Approval Standard

The approval rating values for overseas standards are different from the performance values determined individually. Confirm the values before use.

Model	Standard	File No.	Rating
XC4A-4812	UL/C-UL certified product (Recognized)	E103202	---
XC4B-4811	UL/C-UL certified product (Recognized)	E103202	---
XC4B-4813	UL/C-UL certified product (Recognized)	E103202	---
XC4E-4812	UL/C-UL certified product (Recognized)	E103202	---
XC4E-3212	UL/C-UL certified product (Recognized)	E103202	---
XC4F-4813	UL/C-UL certified product (Recognized)	E103202	---
XC4F-3213	UL/C-UL certified product (Recognized)	E103202	---
XC4G-3212	UL/C-UL certified product (Recognized)	E103202	---
XC4H-3213	UL/C-UL certified product (Recognized)	E103202	---
XC4K-1542	UL/C-UL certified product (Recognized)	E103202	---
XC4L-1546	UL/C-UL certified product (Recognized)	E103202	---
XC4L-1541	UL/C-UL certified product (Recognized)	E103202	---

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0424 (0319)