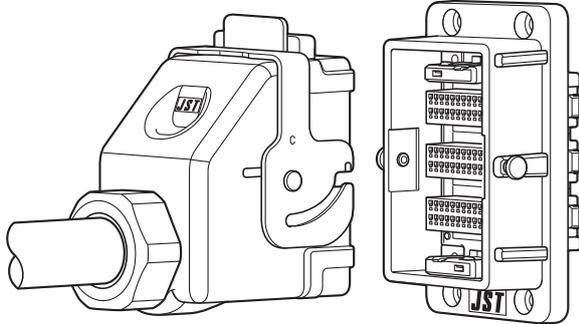# *JFA* CONNECTOR METAL SHELL SERIES

Wire-to-wire connector (For Interface)

Metal shell type I/O connector which contacts are used also with JFA connector J2000 series and J300 series.

・ **Applicable contact and tooling can be unified**
・ **Rigid metal shell**
・ **Waterproof performance**
・ **Misinsertion prevention**

* In using the products, refer to "Handling Precaution for Terminals and Connectors" described on our website (Technical documents of Product information page).
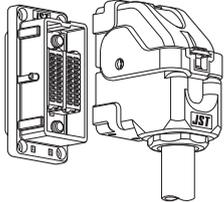* RoHS2 compliance
* Dimensional unit: mm
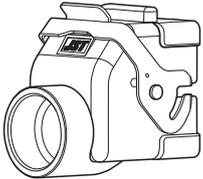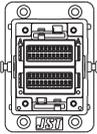* Contact JST for details.

JFA CONNECTOR / METAL SHELL SERIES

Line-up of metal shell

◆J2900

Connector series	J2000 series		
	40P		
J2900			
No. of circuits	20P × 2 pcs.		

◆JFA–M

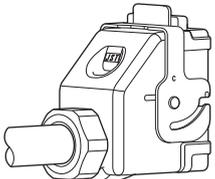| Type	Shell	Examples of combinations			
2 Module		J2000 (22P) × 2	J2000 (22P) × 1＋J300 (12P) × 1	J300 (12P) × 2	
No. of circuits		44P	34P	24P	
3 Module		J2000 (22P) × 3	J2000 (22P) × 2＋J300 (12P) × 1	J2000 (22P) × 1＋J300 (12P) × 2	J300 (12P) × 3
No. of circuits		66P	56P	46P	36P
4 Module		J2000 (22P) × 4	J2000 (22P) × 3＋J300 (12P) × 1 J2000 (22P) × 1＋J300 (12P) × 3	J2000 (22P) × 2＋J300 (12P) × 2	J300 (12P) × 4
No. of circuits		88P	78P, 58P	68P	48P
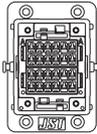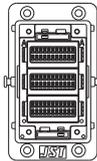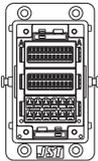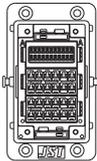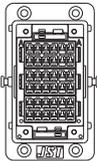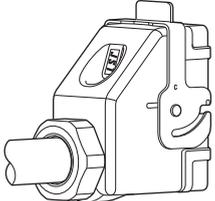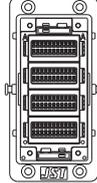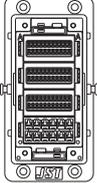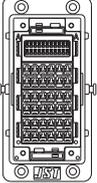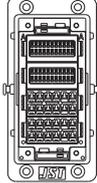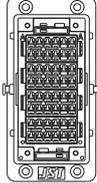
JFA CONNECTOR J2900 SERIES
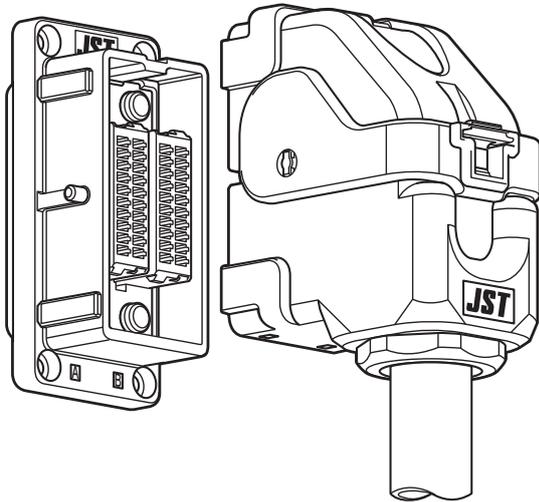
This connector is a metal shell type I/O connector and it's completely waterproof. Contacts are designed to be common use with JFA connector J2000 series.

・ **Rigid metal shell**
・ **Easy mating operation**

■ Standards

ᴙᴸ® ： Recognized E 60389
△ ： R 50354834

■ Specifications

・ Current rating: 3 A AC/DC (AWG #20)
・ Voltage rating: 250 V AC/DC
・ Temperature range: -55℃ to ＋105℃
　　　　　　　　(including temperature rise in applying
　　　　　　　　electrical current)
・ Applicable cable O.D.: 11.1 to 13.5 mm

* Please note that the above general specifications may differ
　from the safety standards.
* In using the products, refer to "Handling Precaution for Terminals
　and Connectors" described on our website (Technical documents
　of Product information page).
* RoHS2 compliance
* Dimensional unit: mm
* Contact JST for details.

Receptacle housing assembly
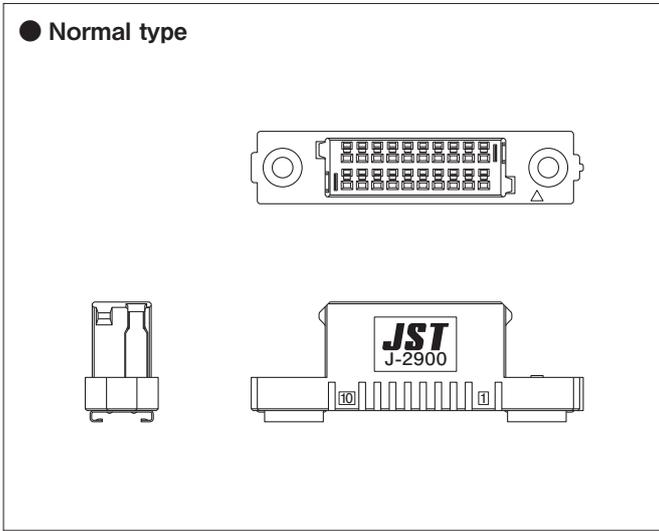
● Normal type

No. of circuits	Model No.	Q'ty/box
20	**J29FA-20-K**	70

RoHS2 compliance

● Anti-misinsertion type
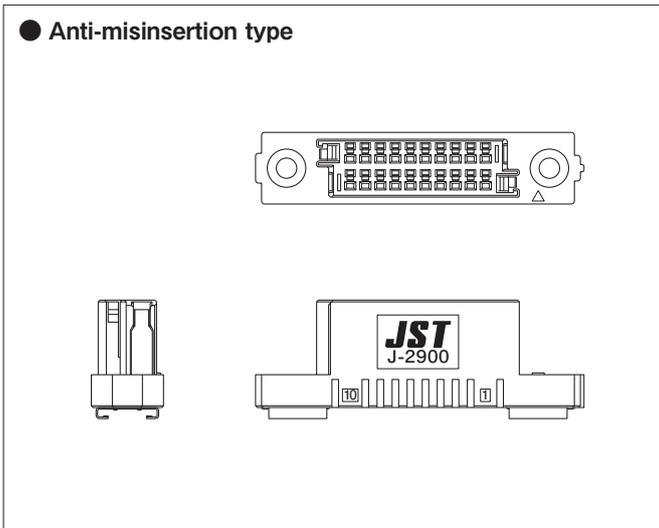
No. of circuits	Model No.	Q'ty/box
20	**J29FA-20-H-1**	70

RoHS2 compliance

Tab housing assembly
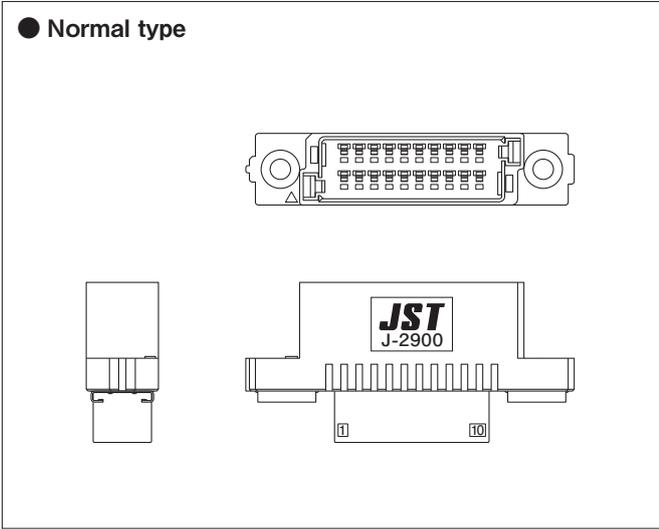
● **Normal type**

No. of circuits	Model No.	Q'ty/box
20	**J29MA-20-K**	70

RoHS2 compliance

● **Anti-misinsertion type**
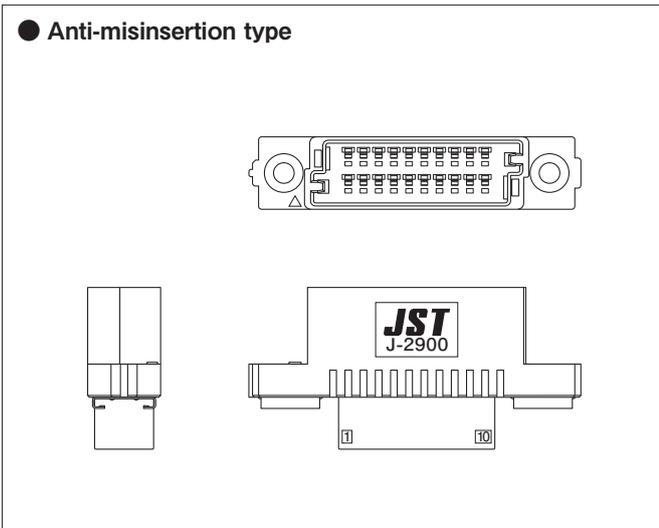
No. of circuits	Model No.	Q'ty/box
20	**J29MA-20-H-1**	70

RoHS2 compliance

METAL SHELL SERIES / J2900

◆ **Wire side**

Shell kit

● **Normal type**
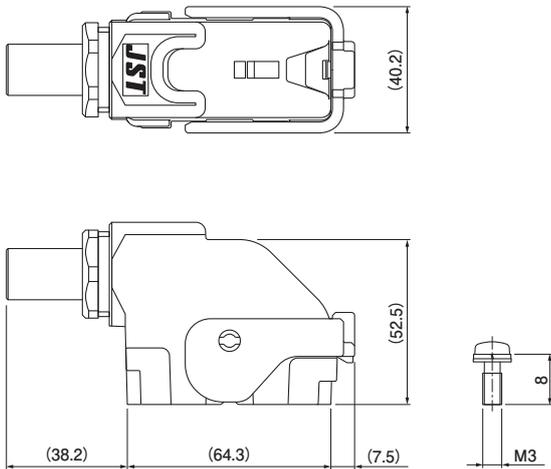
Model No.	Q'ty/box
J29WK-K-1	30

RoHS2 compliance   This product displays (PF) on a label.

● **For Pg21**
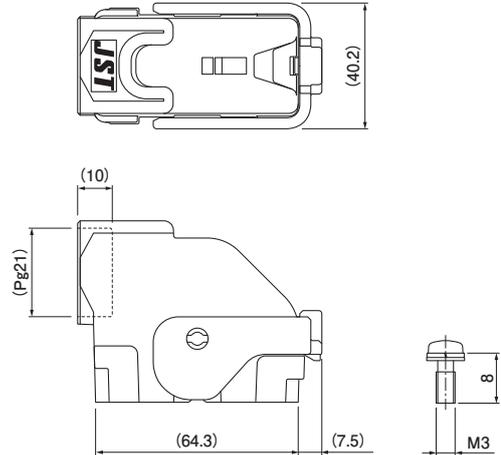
Pg21 screw mounting product (For flexible tubing, etc.)

Model No.	Q'ty/box
J29WK-K-A	35

RoHS2 compliance   This product displays (PF) on a label.

◆ **Panel side**

Shell kit
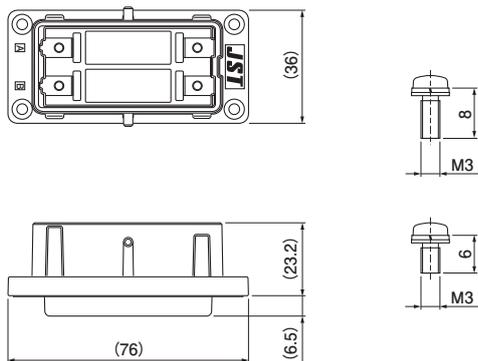
Model No.	Q'ty/box
J29PK-K	35

RoHS2 compliance   This product displays (PF) on a label.

● **Ground terminal**
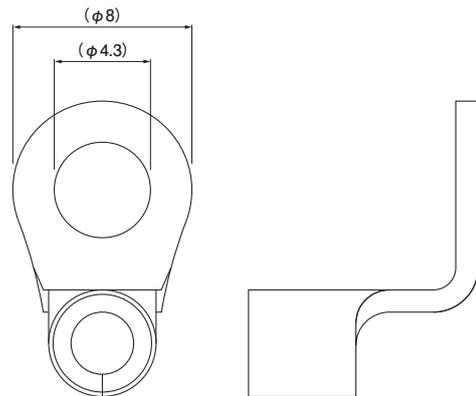
Model No.	Q'ty/box
L3.5-R4	1,000

RoHS2 compliance

JFA CONNECTOR JFA-M SERIES
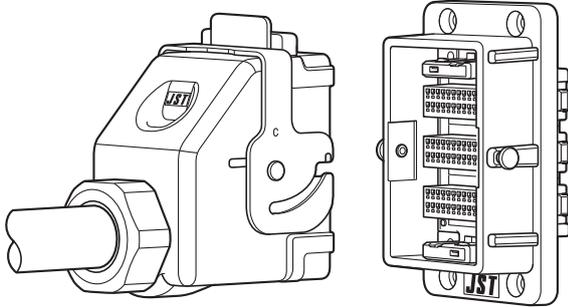
Metal shell type connector which contacts are designed to be common use with JFA connector J2000 series and J300 series.

- Rigid metal shell
- Lever (3 and 4 module types) provides easy mating and unmating connector
- Combination of modular housing

■ Standards

ᴿᵁ° : Recognized E 60389

△ : R50287698

■ Specifications

- Current rating: J2000 Series（2 and 3 Module）
  ···3 A AC/DC（AWG #20）
  J2000 Series（4 Module）
  ···2.5 A AC/DC（AWG #20）
  J300 Series ···5 A AC/DC（AWG #16）
- Voltage range: J2000 Series ···250 V AC/DC
  J300 Series ···600 V AC/DC
- Temperature range: –55℃ to +105℃
  (including temperature rise in applying electrical current)

* Please note that the above general specifications may differ from the safety standards.

* In using the products, refer to "Handling Precaution for Terminals and Connectors" described on our website (Technical documents of Product information page).

* RoHS2 compliance

* Dimensional unit: mm

* Contact JST for details.

METAL SHELL SERIES / JFA-M

Components

◆ **Wire side**

Shell assembly

Wire side shell assembly

J2000 and J300 series
Tab housing or receptacle housing

Guide plate A assembly

Standard: Washer assembly screw
Option: Guide pin A or guide pin B

◆ **Panel side**

Shell assembly

Option: Guide pin A or guide pin B

Panel side shell assembly

Guide plate A assembly or guide plate B assembly

When using guide plate A: Washer assembly screw
When using guide plate B: M4 stepped screw

J2000 and J300 series
Tab housing or receptacle housing

Examples of use

Waterproof I/O connector
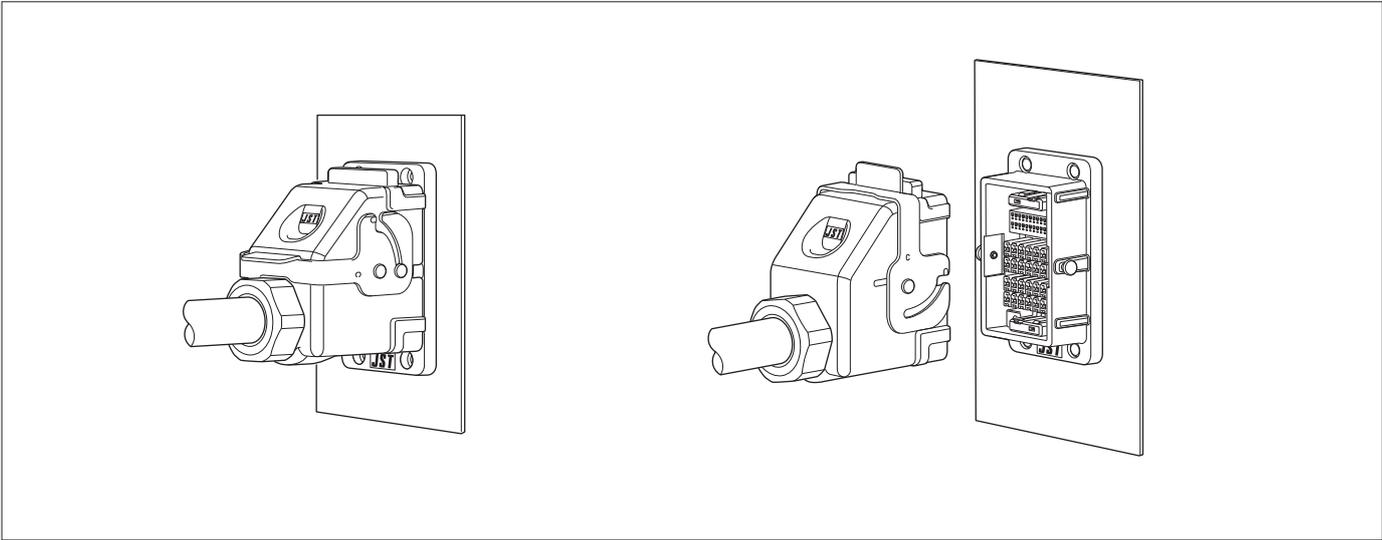
Drawer type
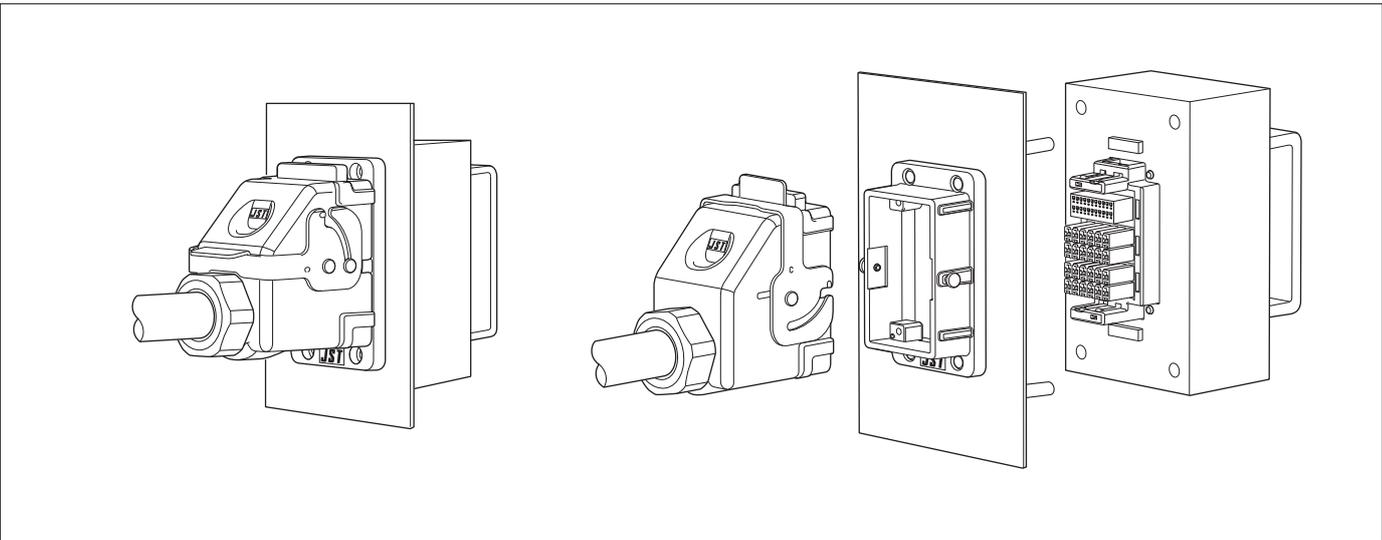
Drawer type (Rack mounting method)

Front mounting of rack panel

Stepped screw

Rack panel

Front mounting of rack panel

Stepped screw

Rack panel
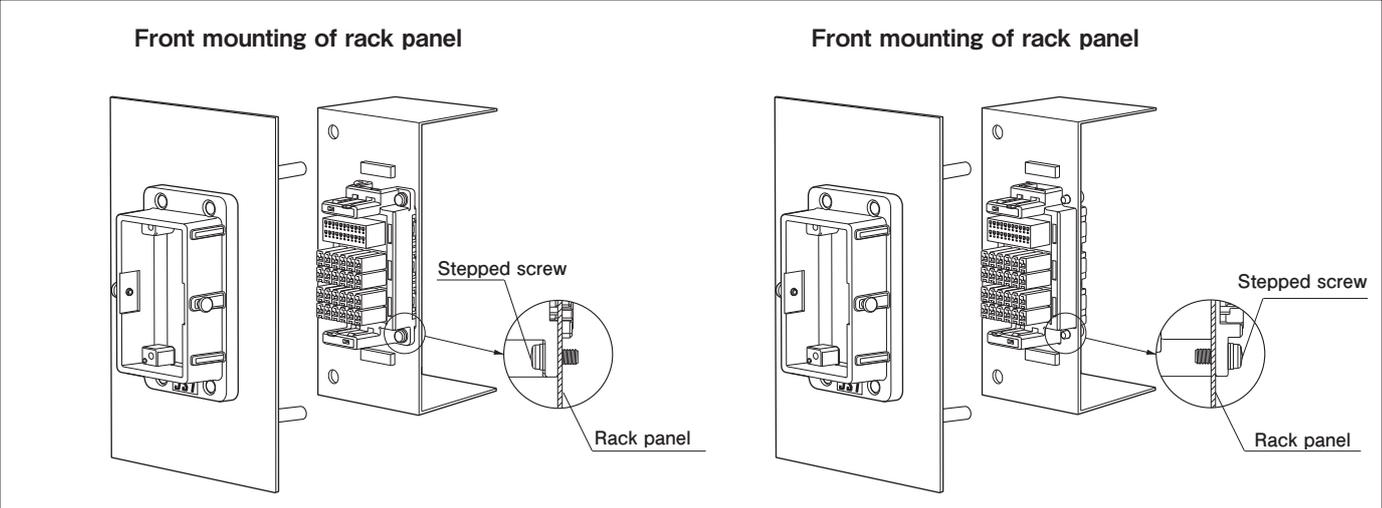
METAL SHELL SERIES / JFA-M

J2000 series housing (User for both panel mounting and drawer type)

● Receptacle housing
JFM2FDN-22V-K
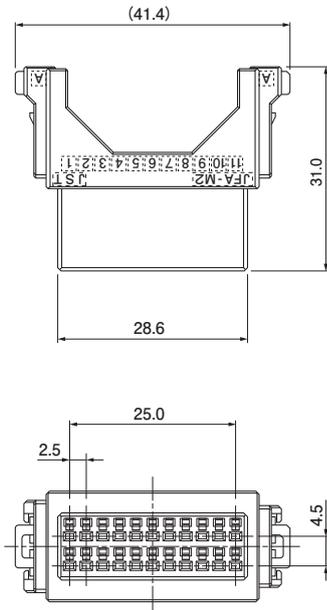
● Tab housing
JFM2MDN-22V-K
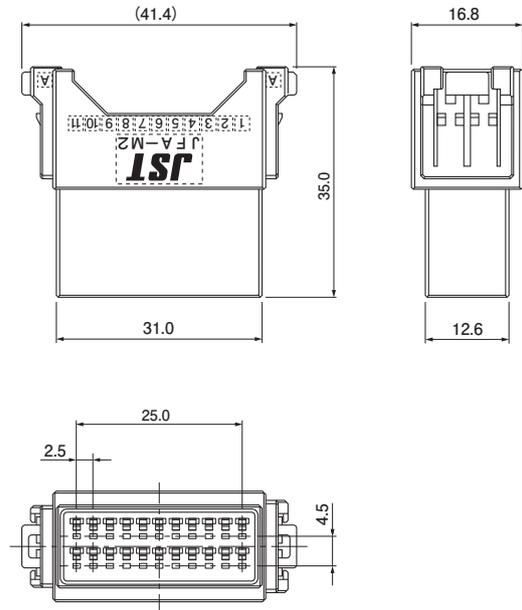
Note: Refer to the J2000 series receptacle contact and sequential tab contact page for the J2000 series contact.

RoHS2 compliance

J300 series housing (User for both panel mounting and drawer type)

● Receptacle housing
JFM3FMN-12V-K

● Tab housing
JFM3MMN-12V-K

Note: Refer to the J300 series receptacle contact and tab contact page for the J300 series contact.

RoHS2 compliance

◆ **Wire side**

Shell assembly

● **Outside screw type clamp nut**

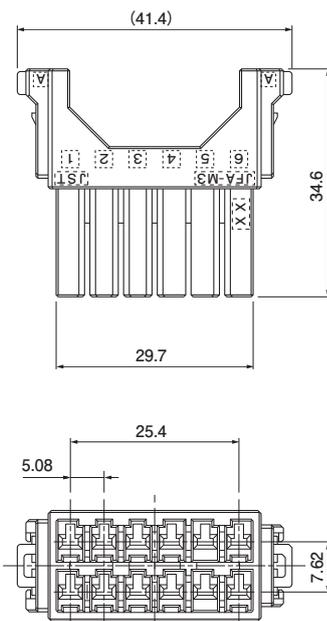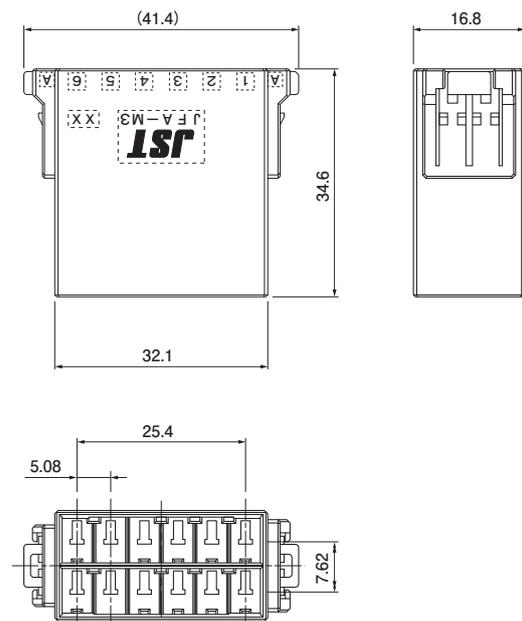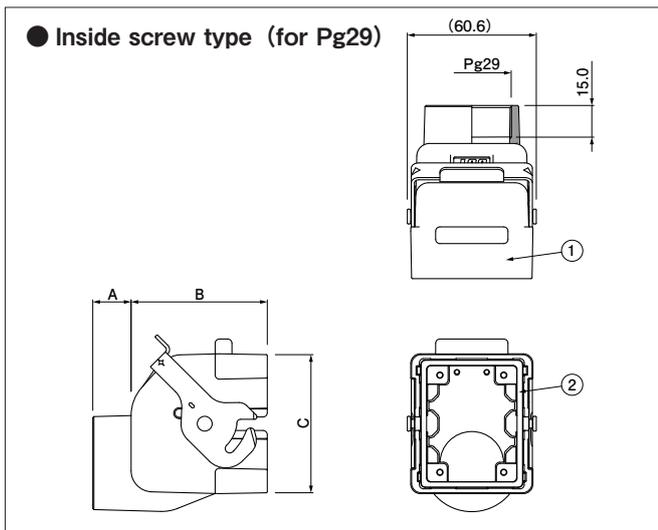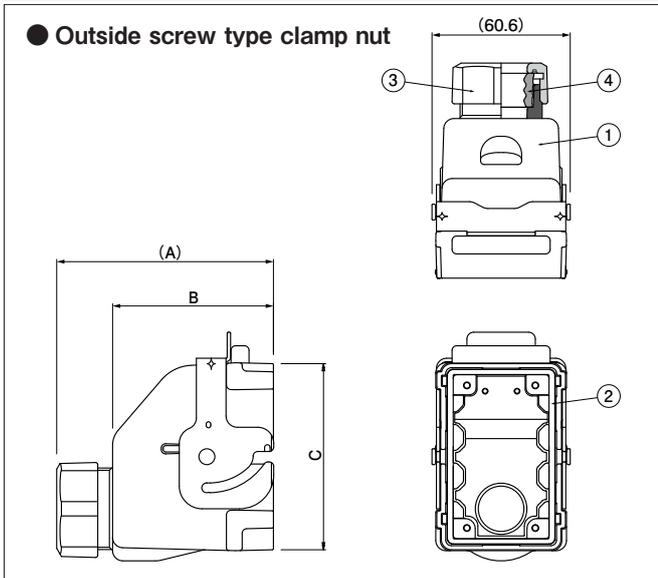| No. of combining housing	Model No.	Applicable Cable O.D. (mm)	Dimensions (mm)		
			A	B	C
3 Module	JFM-WSA-3-B	φ 20.2 to 22.0	95.0	70.5	82.0
	JFM-WSA-3-C	φ 15.5 to 16.5	95.8		
4 Module	JFM-WSA-4-A	φ 26.2 to 28.0	103.5	79.0	99.0
	JFM-WSA-4-C	φ 15.5 to 16.5	104.3		

No.	Parts name	Q'ty
1	Wire side shell	1
2	Seal ring	1
3	Clamp nut	1
4	Clamp rubber	1

RoHS2 compliance   This product displays (PF) on a label.

● **Inside screw type（for Pg29）**

No. of conbining housing	Model No.	Dimension（mm）		
		A	B	C
2 Module	JFM-WSA-2-1	18.0	64.0	66.2

No.	Part name	Q'ty
1	Wide side shell	1
2	Seal ring	1

RoHS2 compliance

◆ **Panel side**

Shell assembly
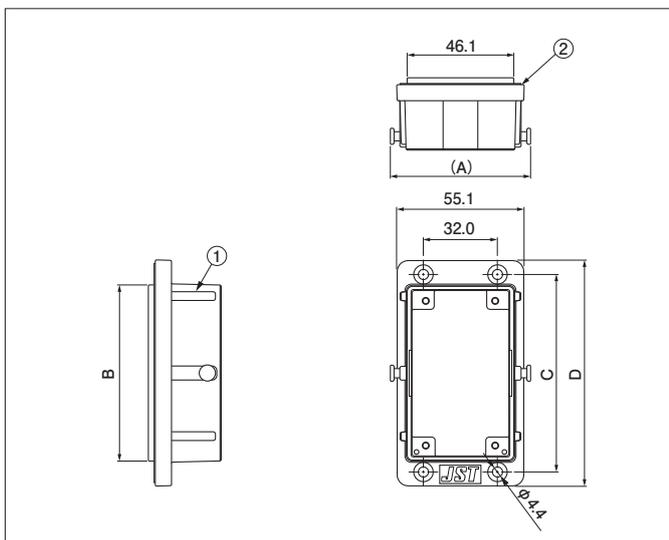
No. of combining housing	Model No.	Dimensions （mm）			
		A	B	C	D
2 Module	JFM-PSA-2	60.5	59.7	69.0	81.5
3 Module	JFM-PSA-3	60.6	76.7	86.0	98.5
4 Module	JFM-PSA-4	60.6	93.7	103.0	115.5

No.	Parts name	Q'ty
1	Panel side shell	1
2	Seal rubber prate	1

RoHS2 compliance   JFM-PSA-3 and JFM-PSA-4 display (PF) on a label.

METAL SHELL SERIES / JFA-M

Guide plate A (With the combination of side and panel side shell assembly)
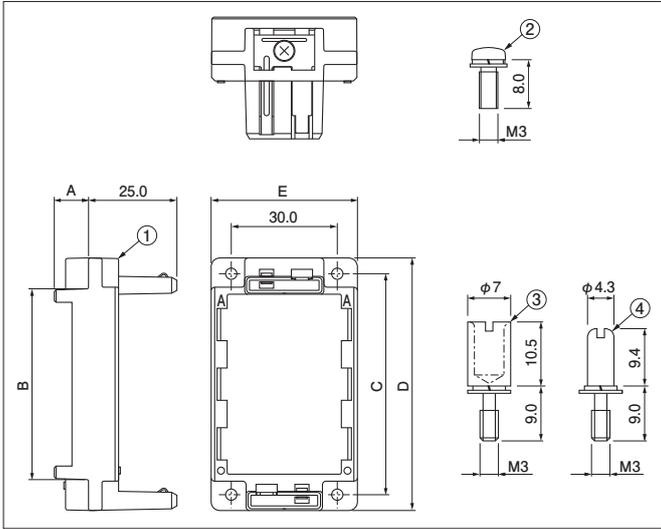
No. of combining housing	Model No.	Dimensions (mm)				
		A	B	C	D	E
2 Module	JFM-GPAK-2	9.6	37.4	46.0	54.8	41.9
3 Module	JFM-GPAK-3	9.7	54.4	63.0	72.0	41.4
4 Module	JFM-GPAK-4	9.7	71.4	80.0	89.0	41.4

| No.	Parts name	Q'ty
1	Guide plate A assembly	1
2	Washer assembly screw	4
3	Guide pin A JFM-PIA3-N	—
4	Guide pin B JFM-PIB3-N	—

RoHS2 compliance
Note: Guide pins A and B are optional parts.

Refer to the combinations list below for the guide pin A/B usage. (Shell mounting pattern at panel side)

No. of guide pins	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6
Guide pin A: 0 pcs. Guide pin B: 4 pcs.						
Guide pin A: 1 pcs. Guide pin B: 3 pcs.						
Guide pin A: 2 pcs. Guide pin B: 2 pcs.						
Guide pin A: 3 pcs. Guide pin B: 1 pcs.						
Guide pin A: 4 pcs. Guide pin B: 0 pcs.						

Note: Shell mounting pattern at wire side becomes opposite to the above pattern.

Panel cut dimensions

● Panel side shell mounting
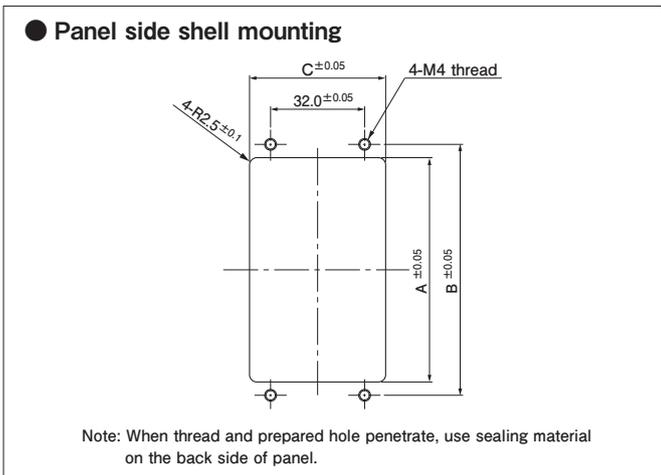
No. of combining housing	Dimensions (mm)		
	A	B	C
2 Module	60.0	69.0	46.4
3 Module	76.9	86.0	46.3
4 Module	93.9	103.0	46.3

Note: When thread and prepared hole penetrate, use sealing material on the back side of panel.
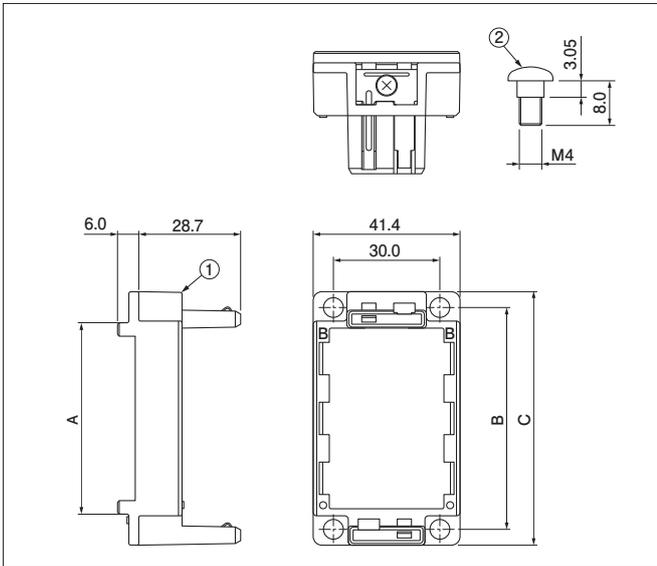
Guide plate B

No. of combining housing	Model No.	Dimensions（mm）		
		A	B	C
3 Module	JFM-GPBK-3	54.4	63.0	72.0
4 Module	JFM-GPBK-4	71.4	80.0	89.0

No.	Parts name	Q'ty
1	Guide plate B Assembly	1
2	M4 stepped screw	4

RoHS2 compliance

Drawer type rack panel cut dimensions

● Front mounting
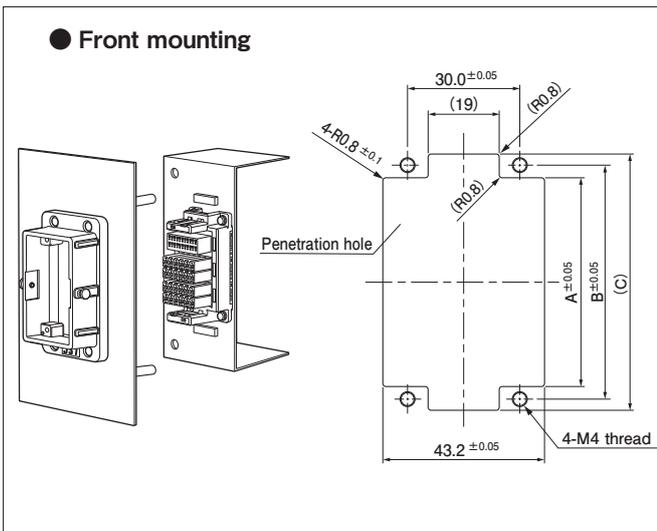
No. of combining housing	Dimensions（mm）		
	A	B	C
3 Module	56.2	63.0	69.0
4 Module	73.2	80.0	86.0

● Rear mounting
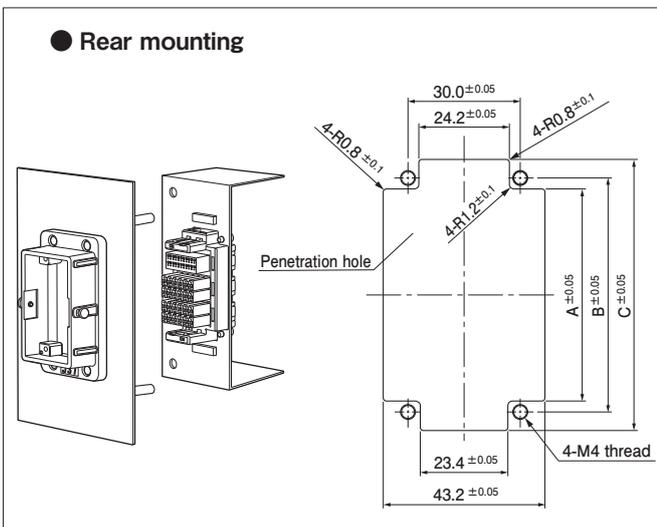
No. of combining housing	Dimensions（mm）		
	A	B	C
3 Module	57.1	63.0	73.0
4 Module	74.1	80.0	90.0