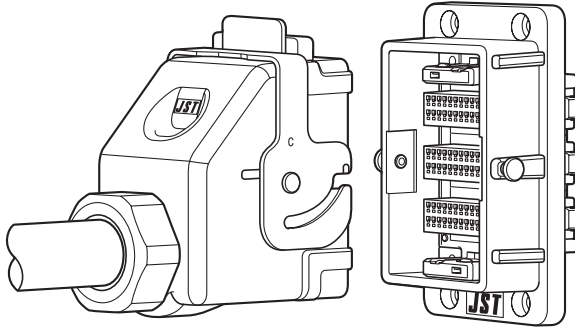




# **JFA CONNECTOR METAL SHELL SERIES**

***Disconnectable Crimp style (Wire-to-wire connectors)***



***Metal shell type I/O connector which contacts are used also with JFA connector J2000 series and J300 series.  
2, 3 or 4 modules for contacts are available.***

- ***Applicable contact and tooling can be unified***
- ***Rigid metal shell***
- ***Waterproof performance***
- ***Misinsertion prevention***
- ***Sequential circuit***

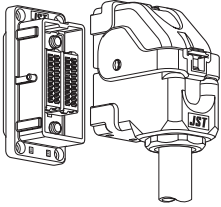
\*Contact JST for details.

\*RoHS compliant products are published.

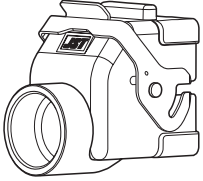
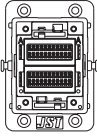

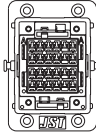
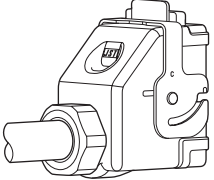
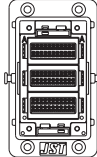
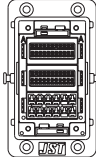
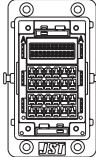
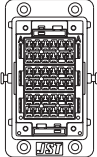
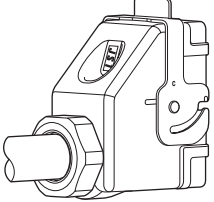
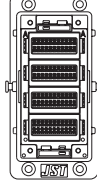
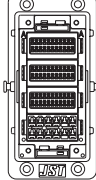
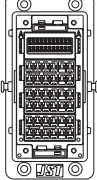
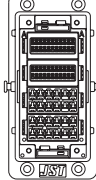
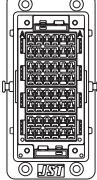
# JFA CONNECTOR/METAL SHELL SERIES

## List of metal shell

### J2900

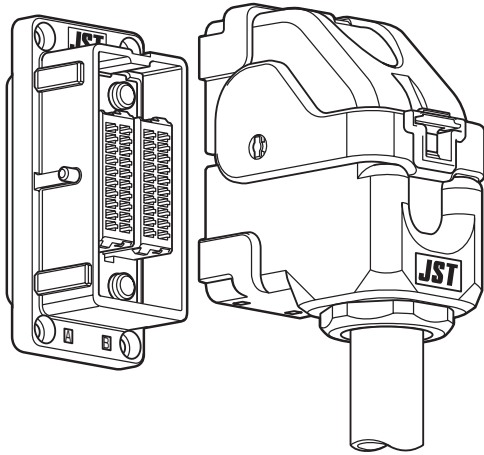
Connector series	J2000 series 40 circuits
<b>J2900</b>	
Circuits	20 × 2 pcs.

### JFA-M

Type	Shell	Hybrid type			
<b>2 Module</b>		J2000(22P) × 2	J2000(22P) × 1+ J300(12P) × 1	J300(12P) × 2	
					
Circuits		44	34	24	
<b>3 Module</b>		J2000(22P) × 3	J2000(22P) × 2 + J300(12P) × 1	J2000(22P) × 1+ J300(12P) × 2	J300(12P) × 3
					
Circuits		66	56	46	36
<b>4 Module</b>		J2000(22P) × 4	J2000(22P) × 3 + J300(12P) × 1	J2000(22P) × 2 + J300(12P) × 2	J300(12P) × 4
			 		
Circuits		88	78, 58	68	48



# 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. The long type tab contact realizes sequential circuit construction.***

- ***Rigid metal shell***
- ***Easy mating operation***
- ***Long type tab contact***

## **Specifications**

- Current rating: 3A max. AC, DC
- Voltage rating: 250V AC, DC
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #28 to #20 (0.08 to 0.75mm<sup>2</sup>)
- Cable O.D.: 11.1 to 13.5mm

\*Contact JST for details.

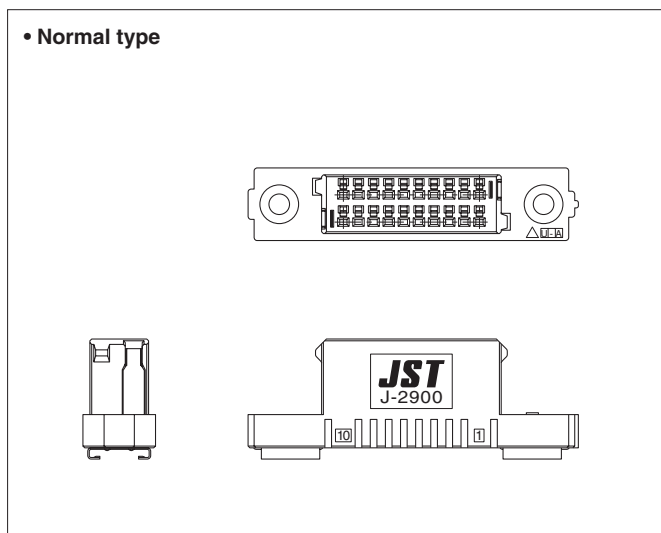
## **Standards**

 Recognized E60389

# METAL SHELL SERIES/J2900

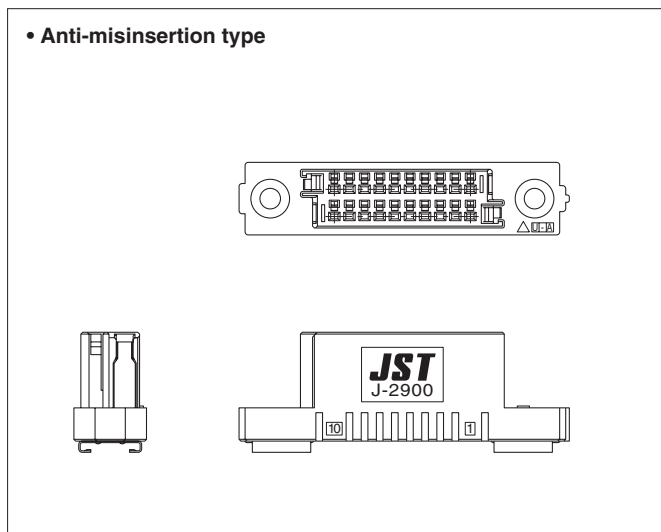
## Receptacle housing assembly

### • Normal type



Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-K</b>	70

### • Anti-misinsertion type

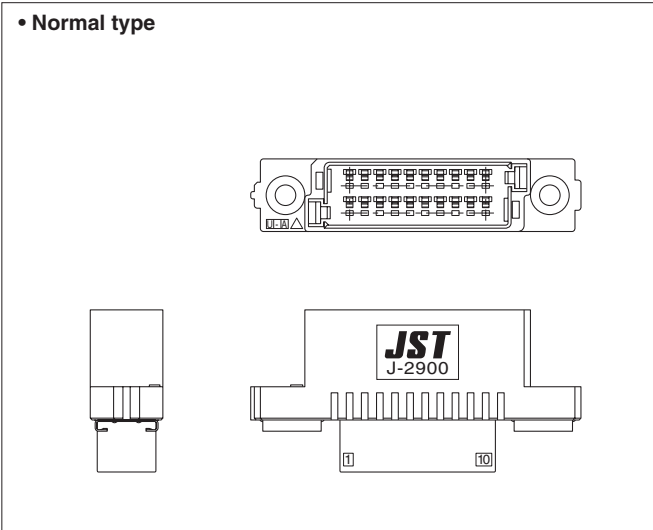


Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-H-1</b>	70

# METAL SHELL SERIES/J2900

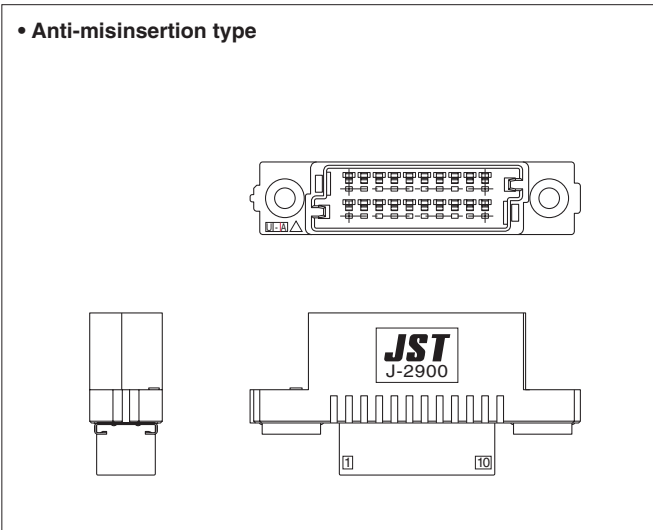
## Tab housing assembly

### • Normal type



Circuits	Model No.	Q'ty/bag
20	<b>J29FA-20-K</b>	70

### • Anti-misinsertion type



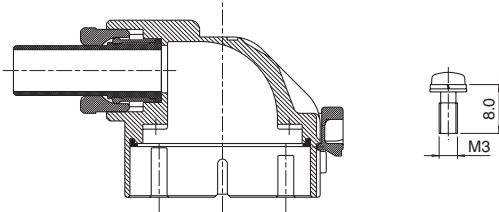
Circuits	Model No.	Q'ty/bag
20	<b>J29MA-20-H-1</b>	70

# METAL SHELL SERIES/J2900

## Wire side

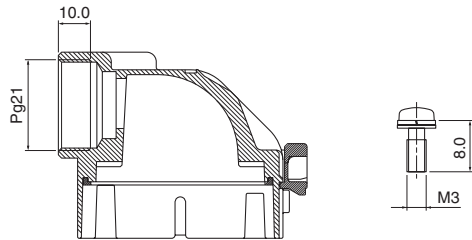
### Shell kit

#### • Normal type



Model No.	Q'ty/bag
J29WK-K-1	30

#### • For Pg21

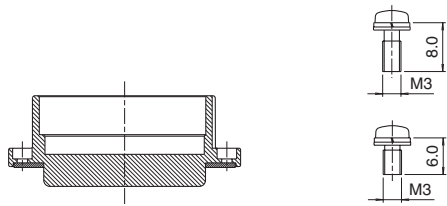


Pg21 screw mounting product (for flexible tubing, etc.)

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

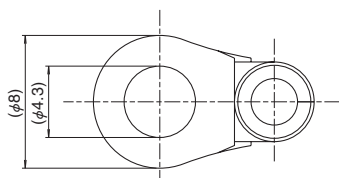
## Panel side

### Shell kit



Model No.	Q'ty/bag
J29PK-K	35

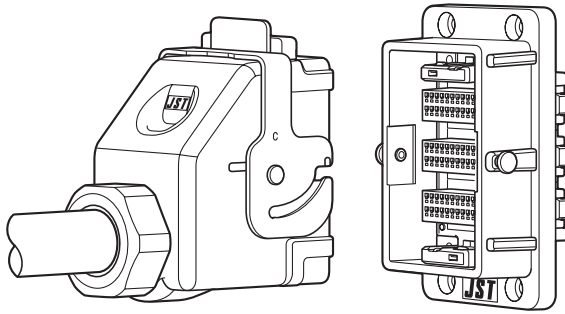
## Ground terminal



Model No.	Q'ty/bag
L3.5-R4	1,000



# JFA CONNECTOR JFA-M SERIES



**Metal shell type I/O 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 type) provides easy mating and unmating connector
- Combination of modular housing

## Specifications

- Current rating: Refer to the following matrix table.
- Voltage rating: 250V AC, DC (J2000 series)  
600V AC, DC (J300 series)
- Temperature range: -55°C to +105°C  
(including temperature rise in applying electrical current)
- Withstanding voltage: 1,500V AC/minute (J2000 series)  
2,200V AC/minute (J300 series)

\*Contact JST for details.

### Current rating

Unit: A

	J2000 Series	J300 Series
	Wire size	
	AWG#20	AWG#16
2 Module	3(44P)	5(24P)
3 Module	3(66P)	5(36P)
4 Module	2.5(88P)	5(48P)

## Standards

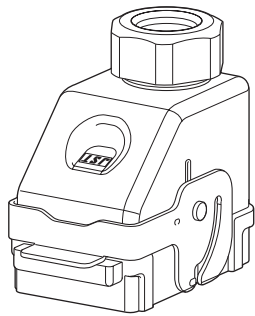
Recognized E60389

# METAL SHELL SERIES/JFA-M

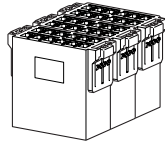
## Components

### Wire side

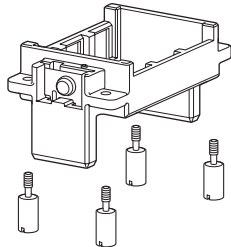
#### Shell assembly



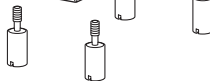
Wire side shell assembly



J2000, J300 — Modules  
Tab housing or receptacle housing



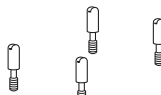
Guide plate A assembly



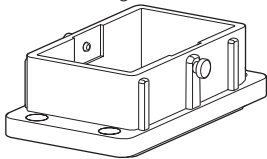
Standard: M3 x 8L washer assembly screw  
Option: Guide pin A or guide pin B

### Panel side

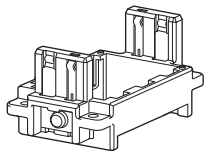
#### Shell assembly



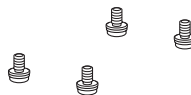
Option: Guide pin A or guide pin B



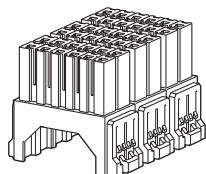
Panel side shell assembly



Guide plate A assembly or guide plate B assembly



When using guide plate A: M3 x 8L washer assembly screw  
When using guide plate B: M4 stepped screw



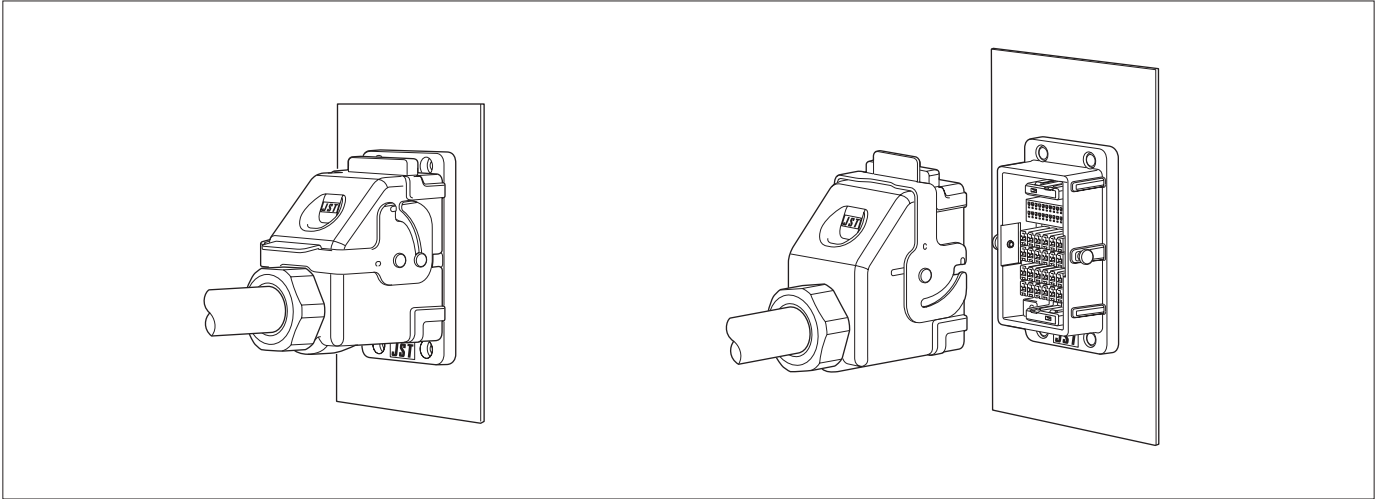
J2000, J300 — Modules  
Tab housing or receptacle housing



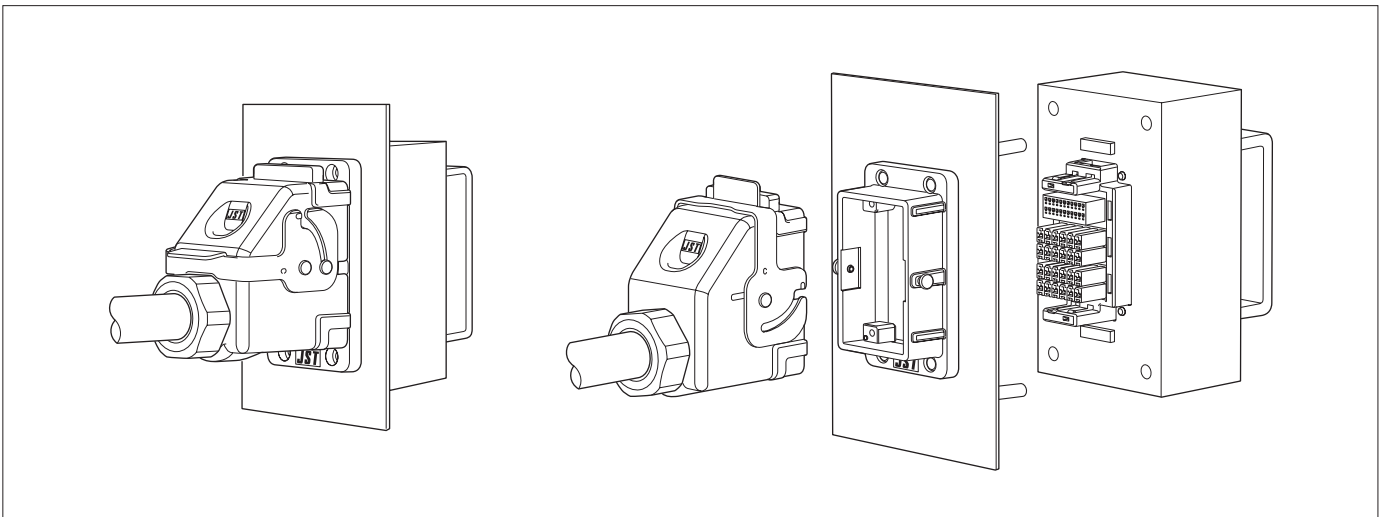
# METAL SHELL SERIES/JFA-M

## Examples of use

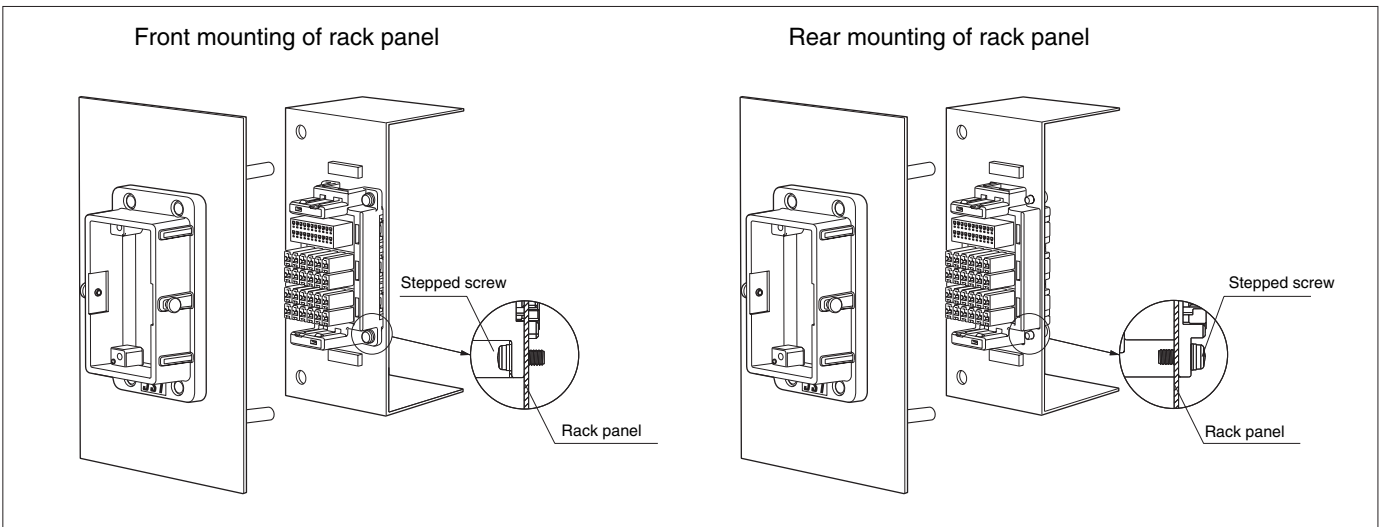
### Waterproof I/O connector



### Drawer type

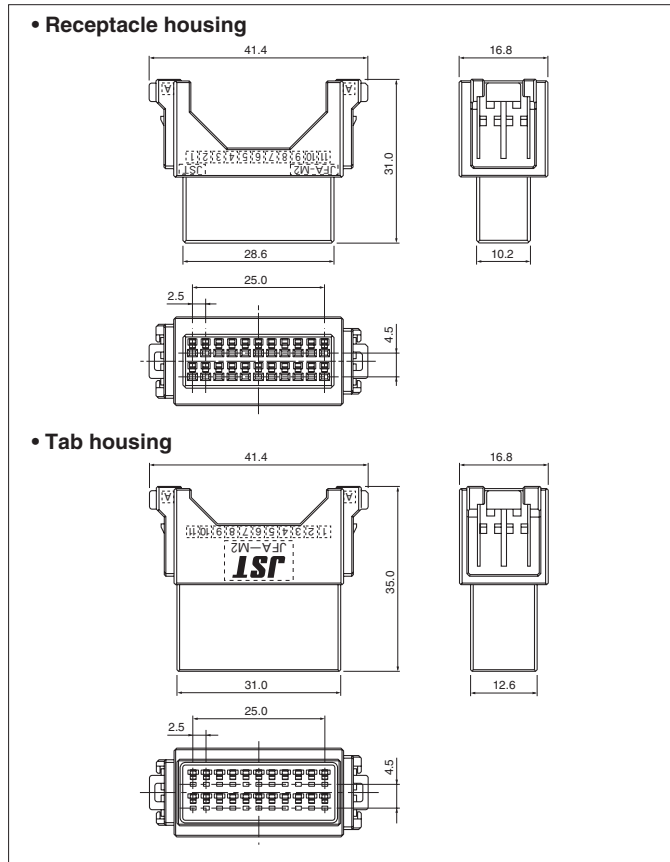


### Drawer type (Rack mounting method)



# METAL SHELL SERIES/JFA-M

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

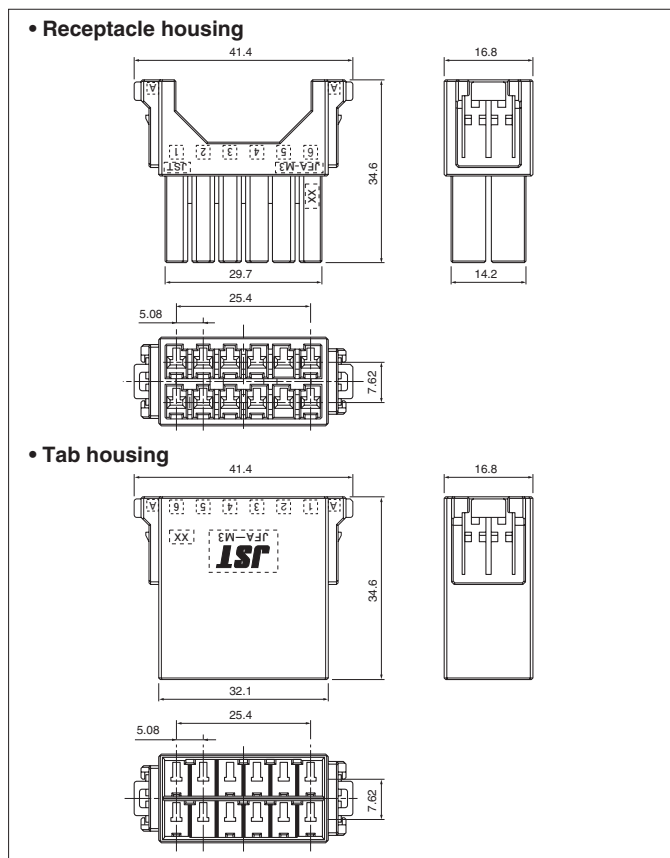


	Model No.	Q'ty/bag
Receptacle housing	<b>JFM2FDN-22V-K</b>	50
Tab housing	<b>JFM2MDN-22V-K</b>	50

**RoHS compliance**

Note: Refer to page 438 about J2000 series contact.

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



	Model No.	Q'ty/bag
Receptacle housing	<b>JFM3FMN-12V-K</b>	50
Tab housing	<b>JFM3MMN-12V-K</b>	50

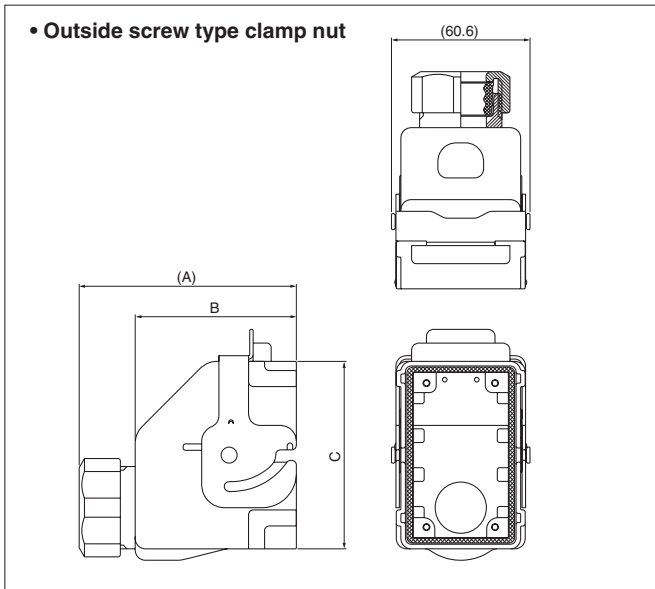
**RoHS compliance**

Note: Refer to page 453 about J300 series contact.

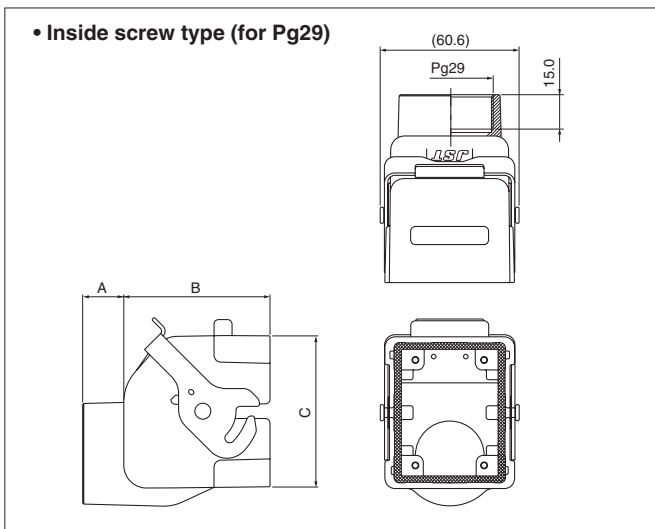
# METAL SHELL SERIES/JFA-M

## Wire side

### Shell assembly



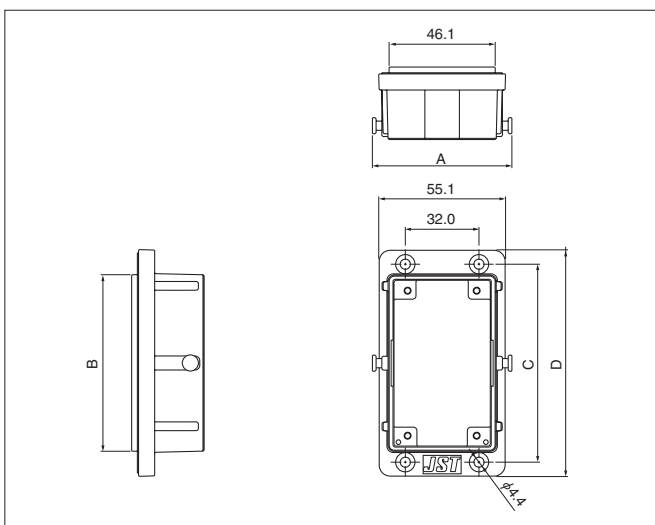
No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
3 module	<b>JFM-WSA-3-B</b>	(95.0)	70.5	82.0	1
4 module	<b>JFM-WSA-4-A</b>	(103.5)	79.0	99.0	1



No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
2 module	<b>JFM-WSA-2-1</b>	18.0	64.0	66.2	1

## Panel side

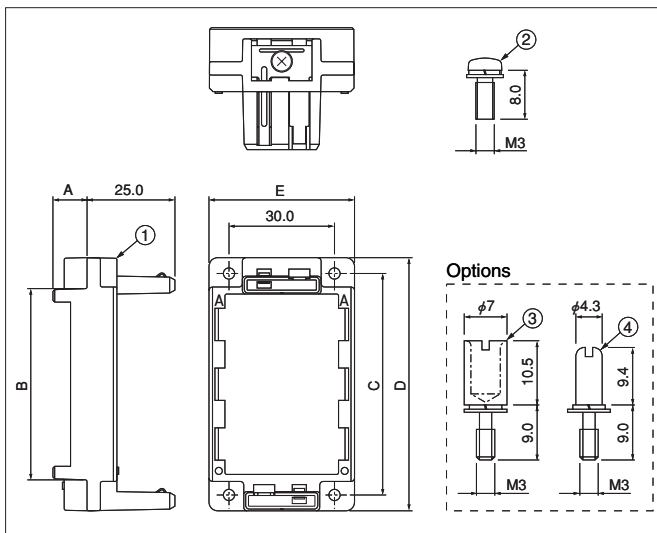
### Shell assembly



No. of combining housing	Model No.	Dimensions (mm)				Q'ty
		A	B	C	D	
2 module	<b>JFM-PSA-2</b>	(60.5)	59.7	69.0	81.5	1 (bag)
3 module	<b>JFM-PSA-3</b>	(60.6)	76.7	86.0	98.5	12 (box)
4 module	<b>JFM-PSA-4</b>	(60.6)	93.7	103.0	115.5	10 (box)

# METAL SHELL SERIES/JFA-M

## Guide plate A (With the combination of wire side and panel side shell assembly)



No. of combining housing	Model No.	Dimensions (mm)					Q'ty
		A	B	C	D	E	
2 module	<b>JFM-GPAK-2</b>	9.6	37.4	46.0	54.8	41.9	1 (bag)
3 module	<b>JFM-GPAK-3</b>	9.7	54.4	63.0	72.0	41.4	24 (box)
4 module	<b>JFM-GPAK-4</b>	9.7	71.4	80.0	89.0	41.4	16 (box)

No.	Parts name	Model No.	Q'ty
①	Guide plate A	—	—
②	Washer assembly screw	—	—
③	Guide pin A	<b>JFM-PIA3-N</b>	1,000 (bag)
④	Guide pin B	<b>JFM-PIB3-N</b>	1,000 (bag)

Note: Guide pin A and guide pin B are option.

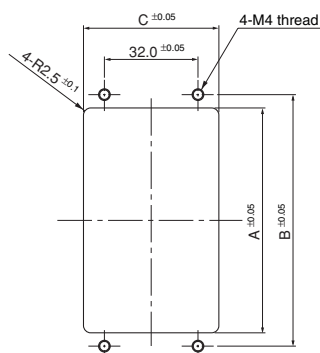
## List of combinations of guide pin A and guide pin B (Shell mounting pattern at panel side)

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

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

## Panel cut dimension

### • Panel side shell mounting

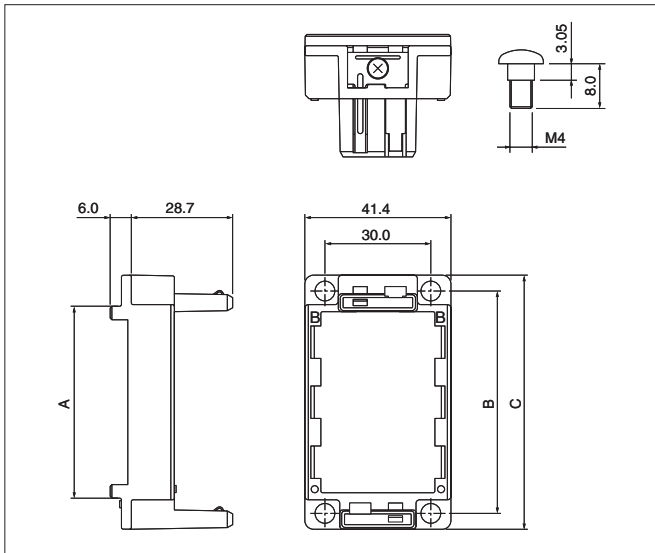


Note: When thread and prepared hole penetrate, use sealing material on the back side of panel.

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

# METAL SHELL SERIES/JFA-M

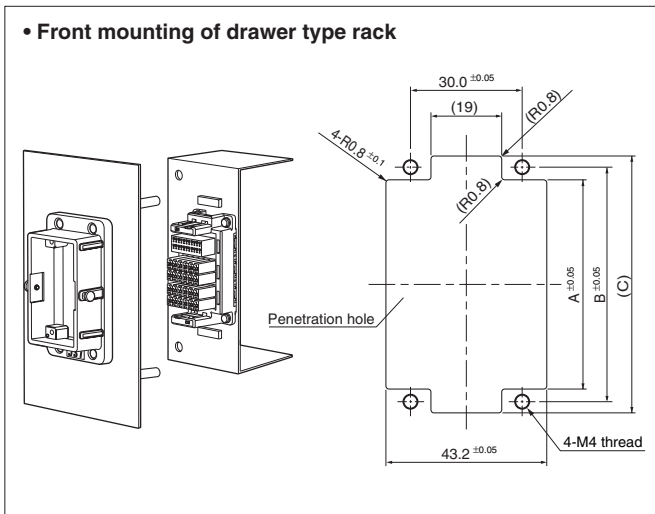
## Guide plate B



No. of combining housing	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
3 module	<b>JFM-GPBK-3</b>	54.4	63.0	72.0	24
4 module	<b>JFM-GPBK-4</b>	71.4	80.0	89.0	16

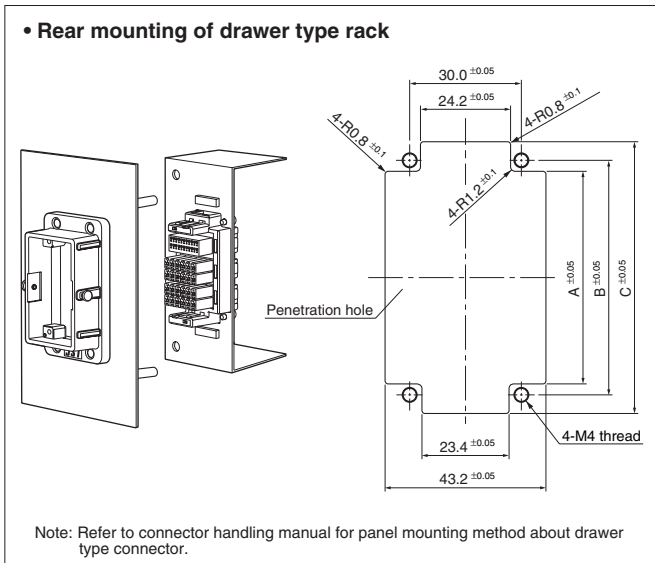
## Panel cut dimension

### • Front mounting of drawer type rack



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 of drawer type rack



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

Note: Refer to connector handling manual for panel mounting method about drawer type connector.