

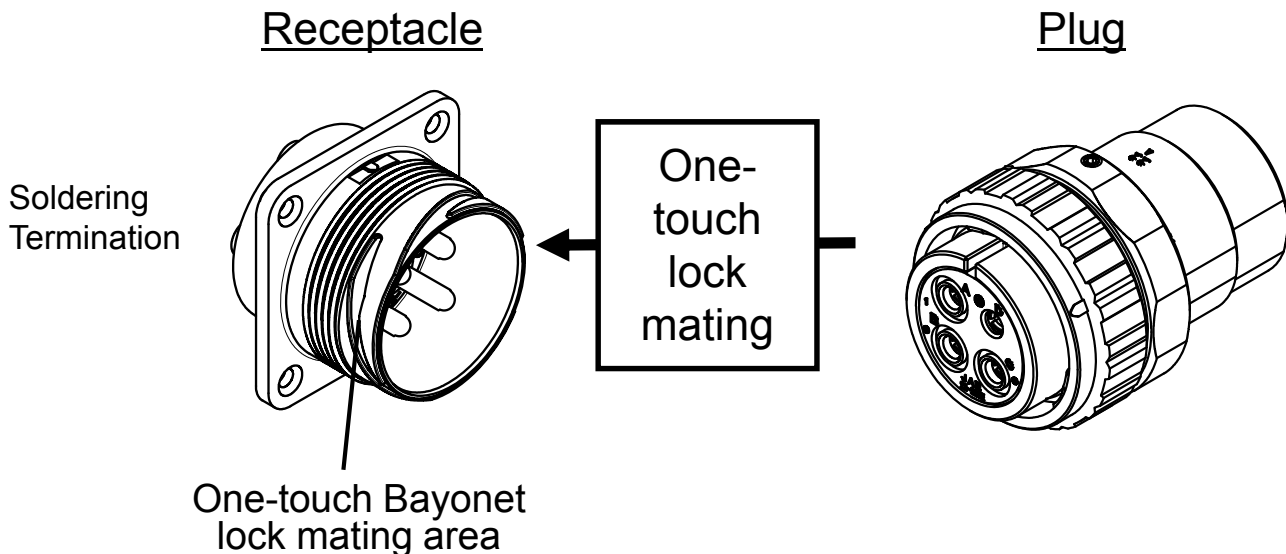
Outdoor Environment Circular Connector

CONNECTOR

**JL10/W Series**

MB-0365-3

July 2023

**RoHS Compliant**

The JL10/W Series is an outdoor circular connector equipped with a bayonet style one-touch lock enabling fast mating and unmating, while providing a reliable lock when in the mated condition.

## Application

Base stations for mobile communication devices, outdoor installed equipment, and other various outdoor equipment.

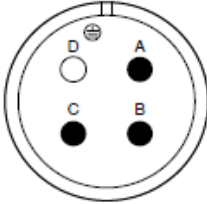
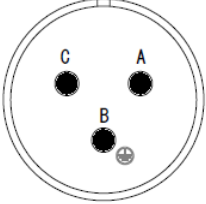
## Features

IP67 water-and dust-proof with excellent environmental performance (including corrosion resistance) for outdoor use.

Secure mating with a bayonet lock system providing superior operability and efficiency (less screw tightening and no need for torque management)

Mating assurance confirmation through aligned guide marks (white arrows) on the plugs and receptacles

## Contact Arrangement and General Specifications

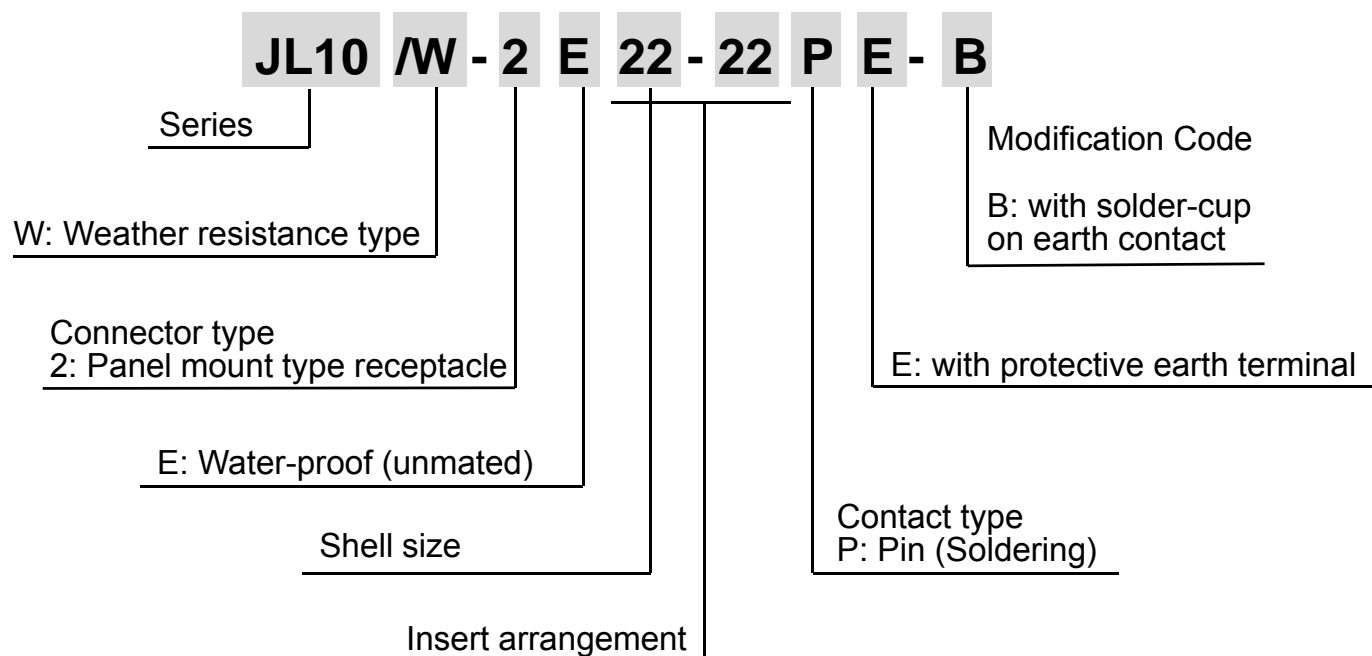
	22-22	22-A3
Contact Arrangement		
Size x Number of Contacts	#8×4	#8×3
Rated Current	46A / position	46A / position
Rated Voltage	500VAC	100VAC
Overvoltage Category		
Pollution Level	2	2
Dielectric Withstanding Voltage	2000VAC for 1 minute	2000VAC for 1 minute
Insulation Resistance	1000MΩ min. (DC500V energized)	1000MΩ min. (DC500V energized)
Ingress Protection	IP67	IP67
Termination	Receptacle: solder Plug: crimp or solder	Receptacle: solder Plug: crimp
Durability	500 mating cycles	500 mating cycles

## Material / Finish

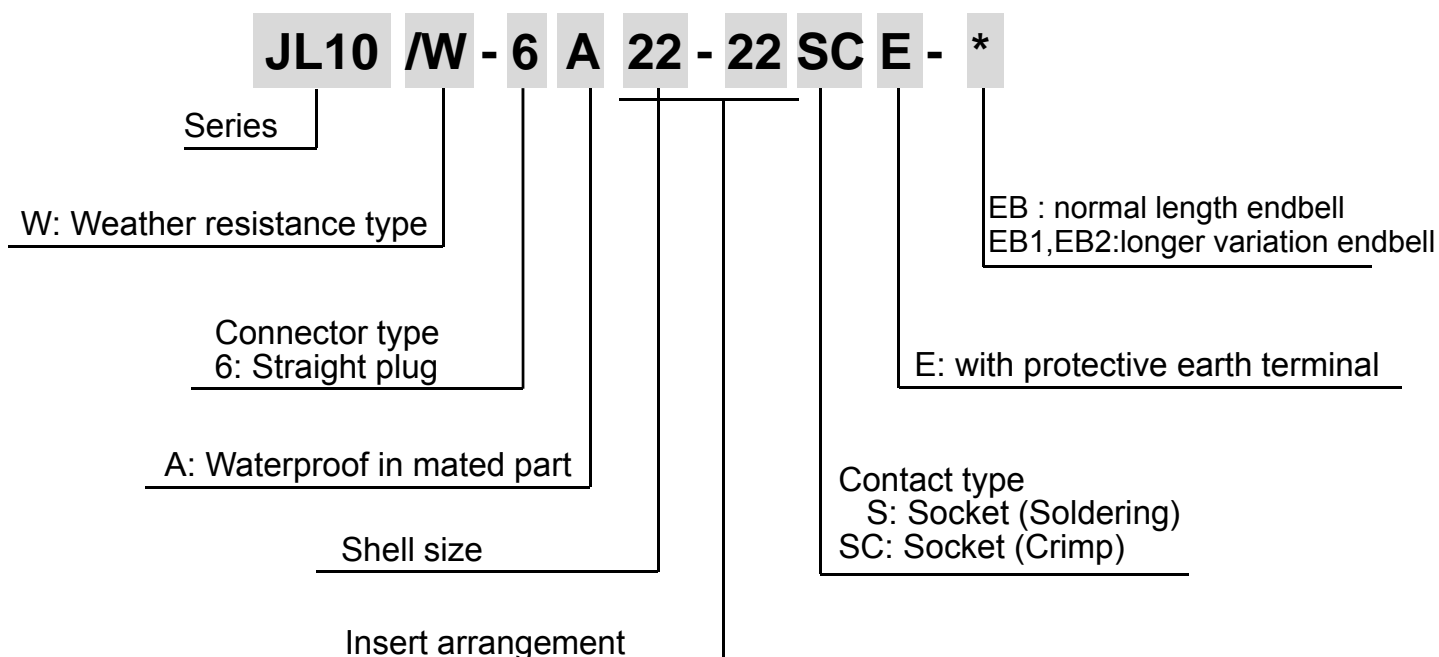
	Components	Material / Finish
Receptacle	Contact	Copper alloy / silver plating
	Earth Pin	Copper alloy / nickel plating
	Front Insulator	Silicone rubber
	Rear Insulator	Synthetic resin
	Shell	Aluminum alloy / electrodeposition painting
	Retaining Ring	Copper alloy / zinc plating
Straight Plug	Endbell	Aluminum alloy / electrodeposition painting
	Set Screw	Stainless steel
	O-ring	Synthetic rubber
	Retention Ring	Copper alloy / zinc plating
	Wave Spring	Stainless steel
	C-Type Ring	Stainless steel
	Contact	Copper alloy/ silver plating
	Front Insulator	Synthetic resin
	Rear Insulator	Synthetic resin
	Assembly Nut	Aluminum alloy / electrodeposition painting
	Coupling Nut	Aluminum alloy / electrodeposition painting
	Barrel	Aluminum alloy / electrodeposition painting

## Contact Ordering Information

### Receptacle



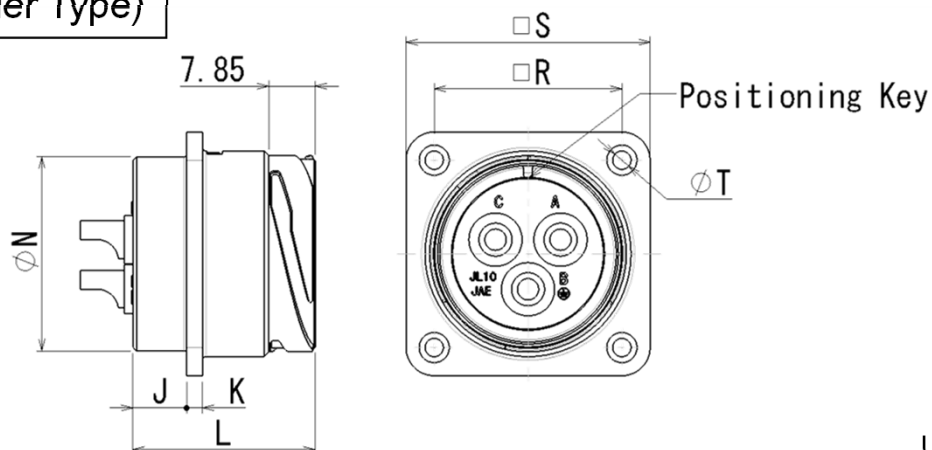
### Plug



## Connector Part Number

Contact Arrangement	Receptacle Part Number	Receptacle Drawing Number	Plug Part Number	Plug Drawing Number
22-22	JL10/W-2E22-22PE-B	SJ122249	JL10/W-6A22-22SE-EB	SJ123145
			JL10/W-6A22-22SCE-EB1	SJ122250
22-A3	JL10/W-2E22-A3PE-B	SJ124816	JL10/W-6A22-A3SCE-EB1	SJ125583
			JL10/W-6A22-A3SCE-EB2	SJ124817

## Receptacle (Solder Type)

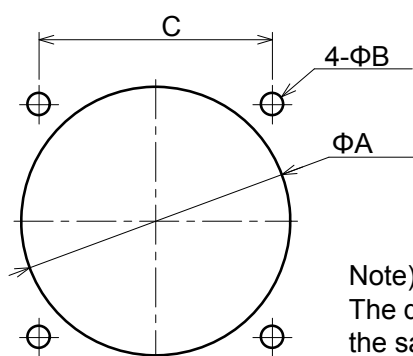


Unit: mm

Shell Size	K $\pm 0.3$	J $\pm 0.3$	L $\pm 0.3$	$\Phi N$ 0 -0.4	R $\pm 0.13$	S $\pm 0.79$	$\Phi T$ +0.2 -0.1
22	2.7	9.1	30.85	33	31.75	41.3	3.1

## Panel Cut Out Dimensions (for reference)

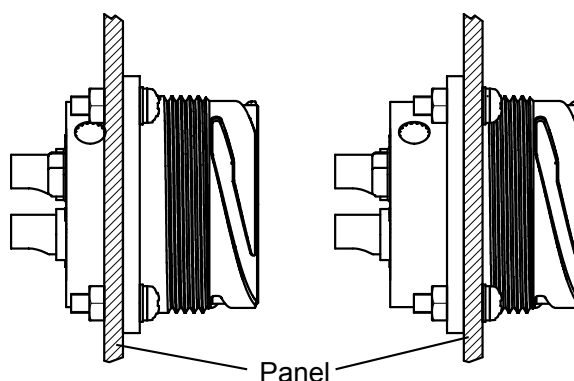
- (1) Front mount: Mounting the receptacle from the front of the panel or enclosure, with the cable connection on the inside.
- (2) Rear mount: Mounting the receptacle from the rear of the panel or enclosure. Extra consideration of panel thickness necessary



Note)  
The diameter  $\Phi A$  is  
the same for front  
mount and rear mount.

Front Mount

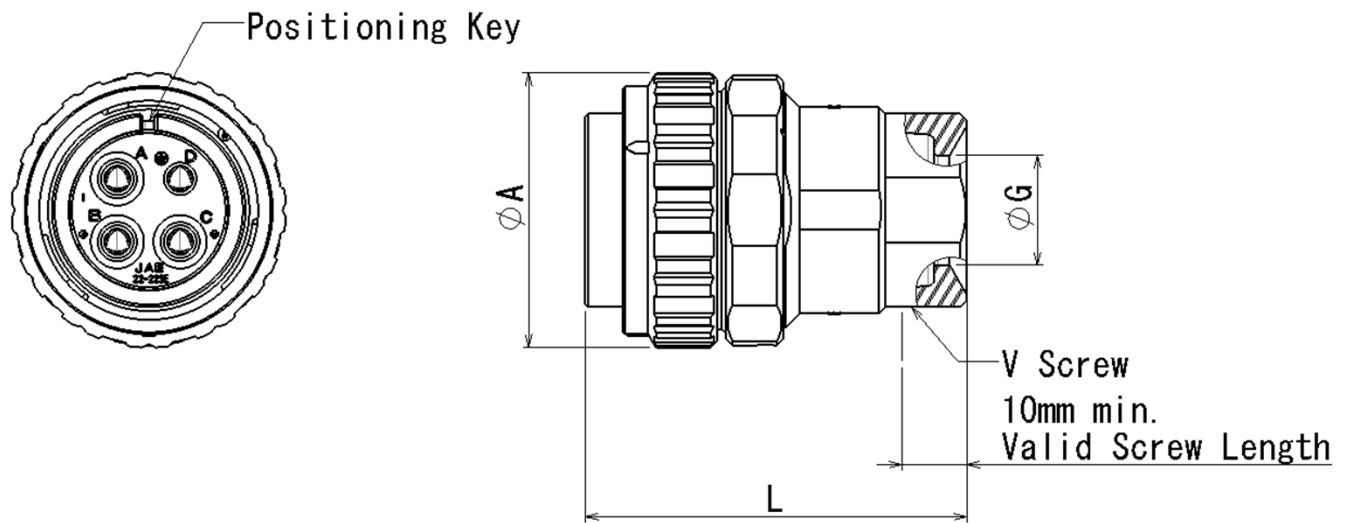
Rear Mount



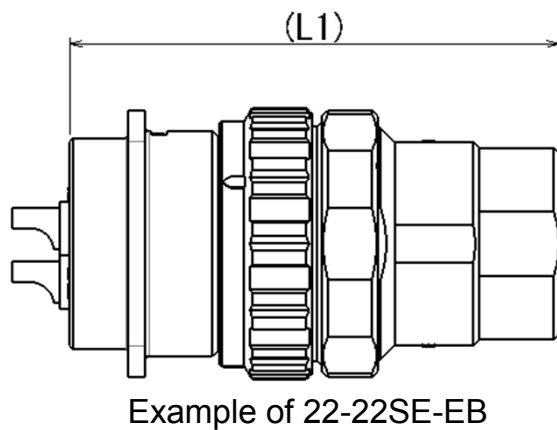
Panel

Shell Size	$\Phi A \pm 0.5$	$\Phi B$	$C \pm 0.13$	Attachment Screw (for reference)		Panel Thickness for Rear Mount
				Metric Screw	Unified Screw	
22	36.6	3.3	31.75	M 3	#4-40	3mm max.

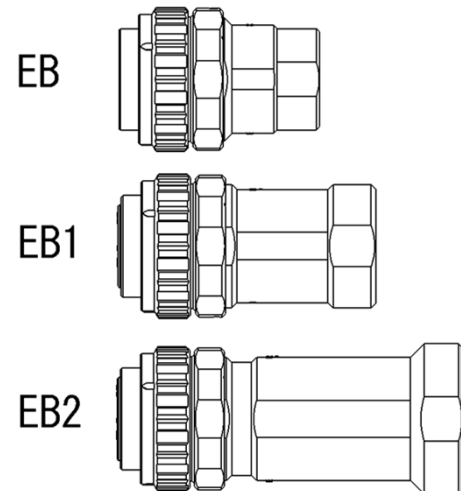
## Straight Plug



## &lt; Mated Condition &gt;



## &lt; Variation of Endbell &gt;



Unit: mm

Shell Size	Endbell	$\Phi A$ $\pm 0.8$	$\Phi G$ $\pm 0.5$	$L$ $\pm 0.8$	(L1)	V Screw
22	EB	42.2	17	58.65	68.5	1 3/16-18UNEF-2A
	EB1	42.2	22	75.35	84.15	1 7/16-18UNEF-2A
	EB2	42.2	30	100.80	109.6	1 3/4-18UNS-2A

## Crimp Contact Part Numbers

Insert Array	Contact Size	Contact Part Number	Drawing Number
22-22	#8	CONT-JL10-08S-J1	SJ122417
22-A3	#8	CONT-JL10-08S-E1	SJ124819
		CONT-JL05-08S-C1	SJ025431
		CONT-JL05-08S-C2	

Note) Crimp type male and female contacts are sold separately.

### Accessories Cable Clamp (sold separately)

Unit: mm

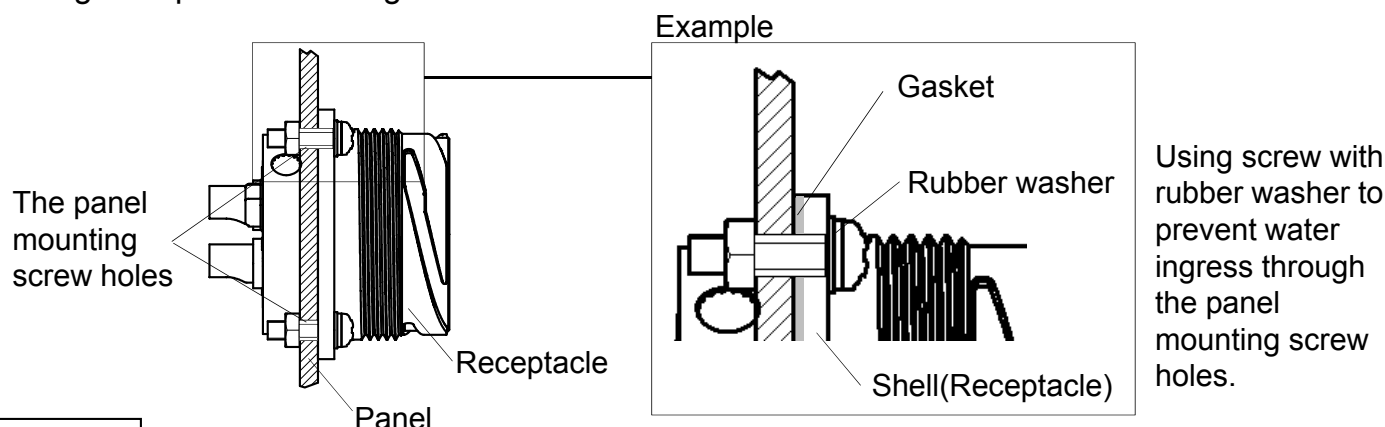
Shell Size	Endbell	Part Number	Applicable Cable Diameter
22	EB	JL10/W-2022CK(14)-CR	12.9 ~ 16
	EB1	JL10/W-2428CK(11)-CR	9 ~ 12
		JL10/W-2428CK(14)-CR	12 ~ 15
		JL10/W-2428CK(17)-CR	15 ~ 18
		JL10/W-2428CK(20)-CR	18 ~ 20
	EB2	JL10/W-32CK(26)-CR	24 ~ 26.5

### Accessories Gasket (sold separately)

There is a gasket that prevents water ingress into the enclosure through the main body when the receptacle is mounted on a panel (chassis).

Shell Size	Gasket Part Number	Drawing Number
22	075-50159	SJ009289

However, **separate** ingress protection is required, by the end-user, to prevent water ingress through the panel mounting screw holes.



### Tools

#### (1) Crimp Tool

Contact Part Number	Tool Type	Applicable Crimp Tool	Manufacturer
CONT-JL10-08S-J1	Hand Crimp	AK15A AK19A	LOBTEX CO., LTD.
CONT-JL10-08S-E1	Hand Crimp	HC20 (R6763 0000 6)	RENNSTEIG(Ger)
CONT-JL05-08S-C1			
CONT-JL05-08S-C2			

#### (2) Contact Extraction Tool

Contact Size	Extraction Tool
#8	JET-GTC-8

Specifications: JACS-50101-5

Handling Instructions: JABL-50101-5

**Notice:**

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii) We may separately give you our support with a quality assurance program that

you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

**Japan Aviation Electronics Industry, Limited**

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