

All-Plastic, Circular, One-touch Lock, and Waterproof Connector

CONNECTOR

# JB10 Series

MB-0342-2

May. 2023

**RoHS Compliant**

Receptacle



Rear mount type



Front mount type

Plug



The JB10 Series is a circular connector with an all-plastic shell and one-touch locking feature, as well as offering integrated EMI shielding.

The all-plastic shell allows the connector to be light weight and low-cost. The connector is IP67 rated in the mated condition providing superior waterproof performance.

The connector is ideal for a wide range of multi-core signal applications, such as factory automation equipment and information/data communication devices.

## Applicable Market

Machine tools, servo motors, robotics, semi-conductor manufacturing equipment, information/communication devices, measuring instrument, broadcasting devices, and various other applications.

## Features

- One-touch, push-and-twist, locking mechanism for easy handling and superior vibration resistance.
- Plastic shell, light-weight and low-cost connector.
- IP67 rated waterproof performance in mated condition.
- Integrated EMI shielding structure.
- Tool-less shield termination process for simple harness assembly.
- Highly reliability multi-point socket contact structure for vibration resistance.
- Selectable insert orientation – pin or socket insert can be selected based on application requirement.
- 2 types of receptacles, front mount and rear mount types available.

## General Specifications

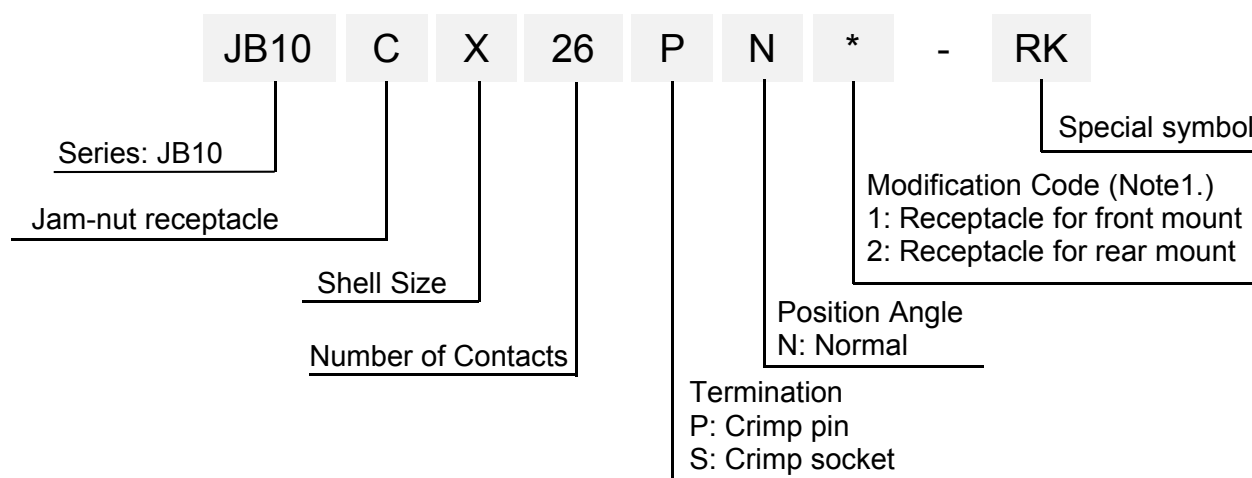
Item	Specifications and Performance
Rated Current	1A max. / pin
Rated Voltage	100VAC
Dielectric Withstanding Voltage	900VAC (per minute)
Insulation Resistance	1000MΩ min. (DC500V energized)
Operating Temperature	-20°C ~ +125°C
Mating Cycle	500 times
Waterproof Performance	IP67 (when connector is mated)
Specifications	JACS-50118
Handling Instruction	JAHL-50118

## Materials and Finishes

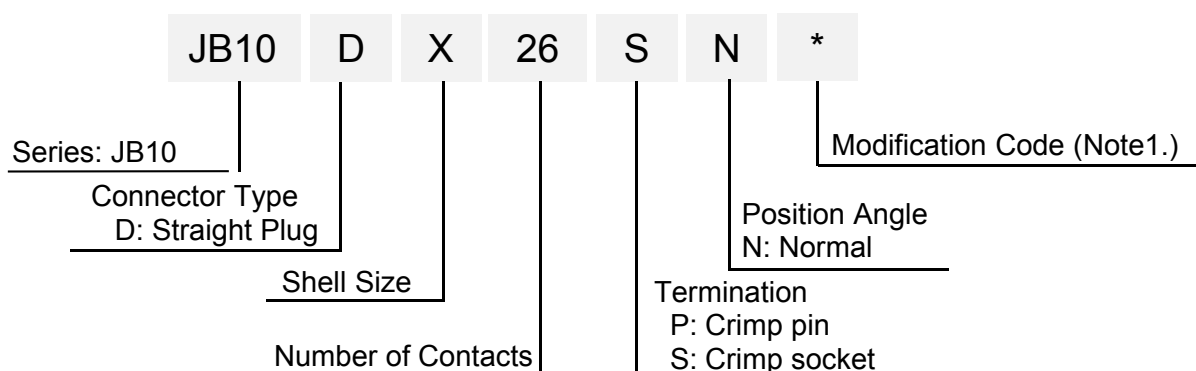
	Components	Materials and Finishes
Receptacle	Insulator	Synthetic resin
	Shell	Synthetic resin
	Hexagon Nut	Synthetic resin
	O-ring	Synthetic rubber
	Shield	Copper alloy / Sn plating
	C-type Retaining Ring	Stainless steel
Plug	Insulator	Synthetic resin
	Barrel	Synthetic resin
	Coupling Nut	Synthetic resin
	Endbell	Synthetic resin
	Ground Nut	Synthetic resin
	Bushing	Synthetic rubber
	O-ring	Synthetic rubber
	Spring	Stainless steel
	Shield (for plug)	Copper alloy / Sn plating
	Shield (for endbell)	Copper alloy / Sn plating
	Clamp Saddle	Aluminum alloy / Zn plating
	Screw	Steel / Zn plating
	Washer	Steel / Zn plating
Contact	Pin Contact	Copper alloy / Au plating over Ni
	Socket Contact	Copper alloy / partial Au plating over Ni
Dust Cap	Dust Cap	Synthetic rubber
	Rope	Stainless steel
	Round Terminal	Copper alloy / Sn plating

## Ordering Information

### Receptacle

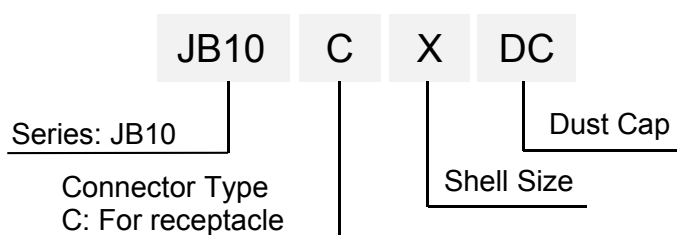


### Plug



Note1. The content of modification code depends on its production type.  
For further detail, please refer to the applicable product drawing.

### Dust Cap



### Connector Part Number

Number of Contacts	Receptacle		Plug	
	Part Number	Drawing Number	Part Number	Drawing Number
26 position	JB10CX26PN1-RK	SJ120007	JB10DX26SN1	SJ116478
	JB10CX26PN2-RK	SJ120008		
	JB10CX26SN1-RK	SJ120009	JB10DX26PN1	SJ116480
	JB10CX26SN2-RK	SJ120010	JB10DX26PN2	SJ118906
Dust Cap	JB10-CX-DC	SJ117741	—	—

**Contact Part Number**

Contact Type	Pieces	Applicable Contact	Drawing Number	Applicable Wire Size
Socket Contact	Individual (100pcs)	JN2V-22-20S-PKG100	SJ117814	AWG#20~#21
		JN2V-22-22S-PKG100	SJ117812	AWG#21~#25
		JN2V-22-26S-PKG100	SJ117813	AWG#26, #28
	Reel (10,000pcs)	JN2V-22-20S-10000	SJ116974	AWG#20~#21
		JN2V-22-22S-10000	SJ116972	AWG#21~#25
		JN2V-22-26S-10000	SJ116973	AWG#26, #28
Pin Contact	Individual (100pcs)	JN1-22-20P-R-PKG100	SJ037430	AWG#20~#21
		JN1-22-22P-PKG100		AWG#21~#25
		JN1-22-26P-PKG100		AWG#26, #28
	Reel (10,000pcs)	JN1-22-20P-R-10000	SJ037431	AWG#20~#21
		JN1-22-22P-10000		AWG#21~#25
		JN1-22-26P-10000		AWG#26, #28

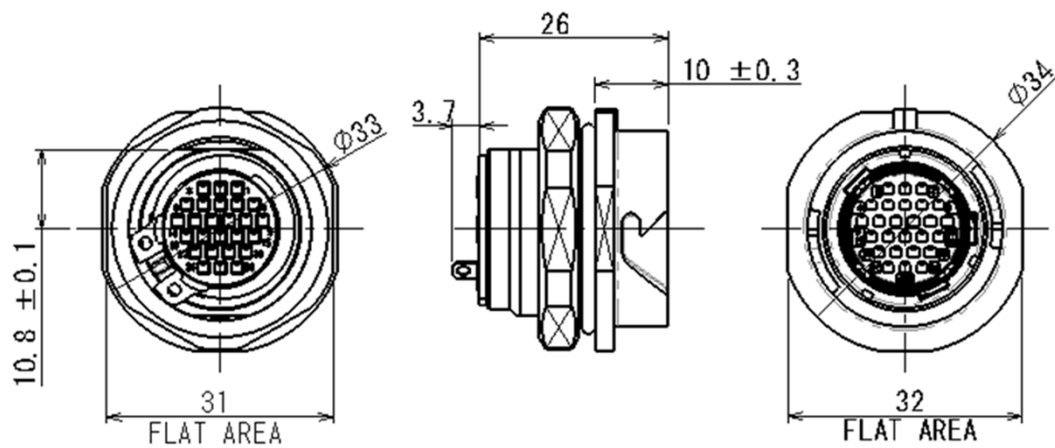
**Tool List**

Contact Size	Tool Type	Applicable Wire	Applicable Tool	Tool Handling Instructions
#22	Hand tool for individual contact	AWG#20,#21	CT150-2C-JN2V	T700406
		AWG#22,#24	CT150-2B-JN2V	
		AWG#26,#28	CT150-2-JN2V	
	Semi-automatic applicator for reel contact	AWG#20~#28	350-JN1-2C 3502-JN1-2C	T703294 T703413

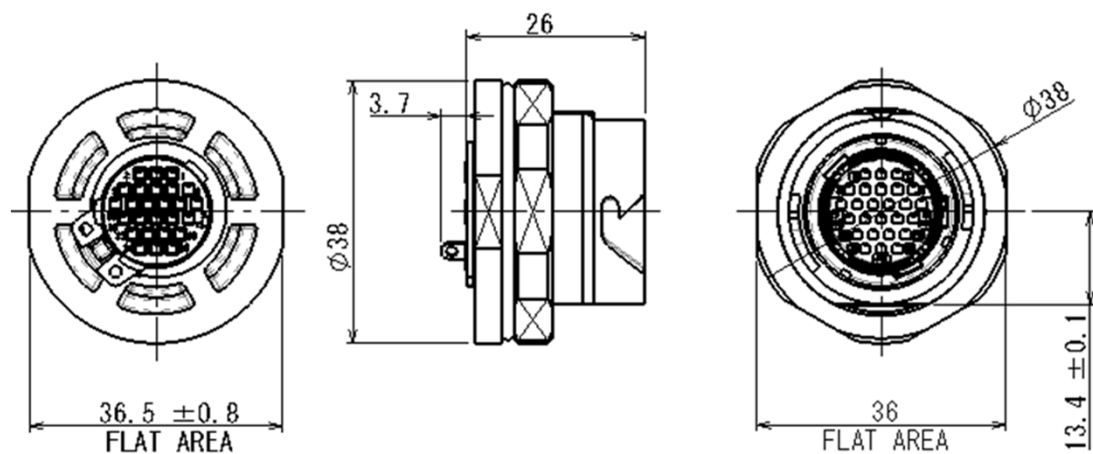
Contact Size	Tool Type	Applicable Tool
#22	Extraction tool	ET-JN1

## Outer Dimensions

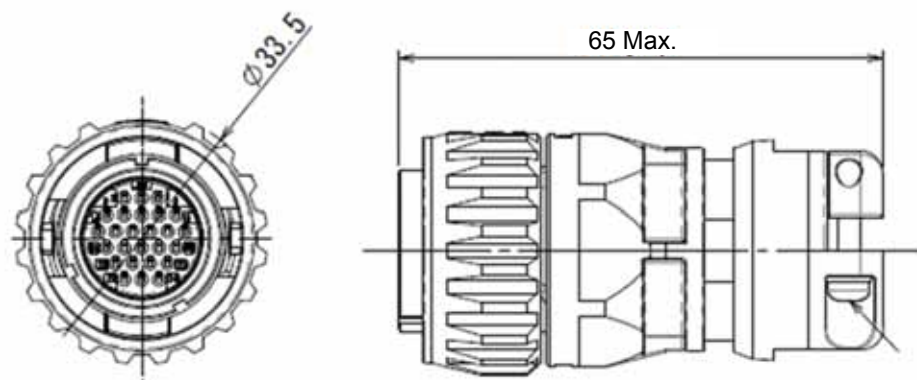
## Receptacle: Front of panel mount type



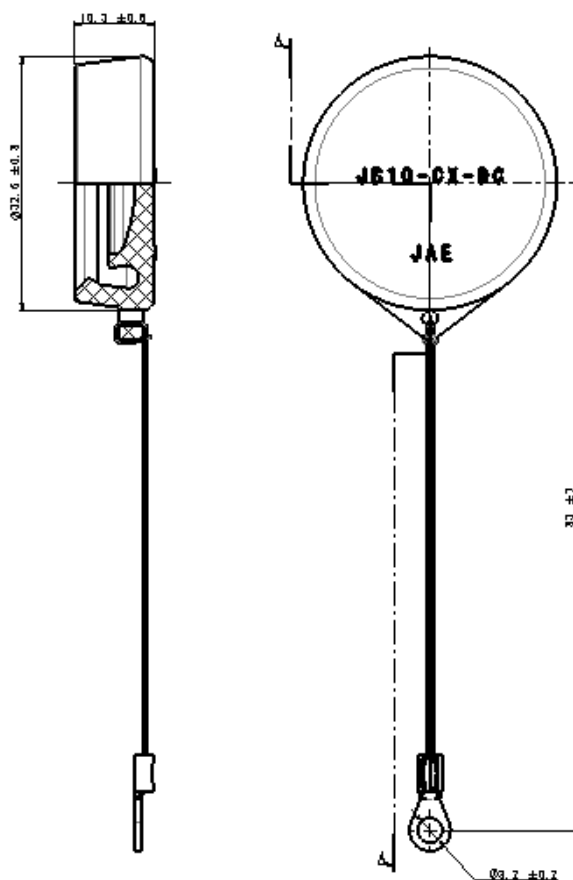
## Receptacle: Rear of panel mount type



## Plug



## Dust Cap for receptacle

**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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