

Outdoor Optical Connector Compatible with Field Harness Assembly CONNECTOR

# FO-BD7D Series

MB-0391-1

Sep.2023

**RoHS Compliant**

FO-BD7D is an optical pluggable connector for outdoor use which can be assembled on-site. This connector series addresses common thermal issues caused by optical modules by embedding the optical module into the FO-BD7D plug.

With the optical module embedded into the plug connector, field technicians can mate and assemble the optical harness while safely on the ground rather than assembling on the installed base station.

In contrast to the FO-BD7 Series, which is already for sale, the FO-BD7D Series is compatible with an LC duplex connection. It is possible to attach the general-purpose LC harness to the connector rather than a custom harness, making it more convenient to use.

## Application

- Base stations for mobile communication devices
- Outdoor equipment such as monitoring cameras

## Features

Field assembly of harness is possible

Simplified process for replacing optical module

Visual alignment markings to prevent inaccurate mating

Improved thermal performance by housing optical module in the plug connector rather than inside the device.

IPx7 water with excellent outdoor environmental performance

Optical module can accept standard LC fiber optic connectors

## General Specifications

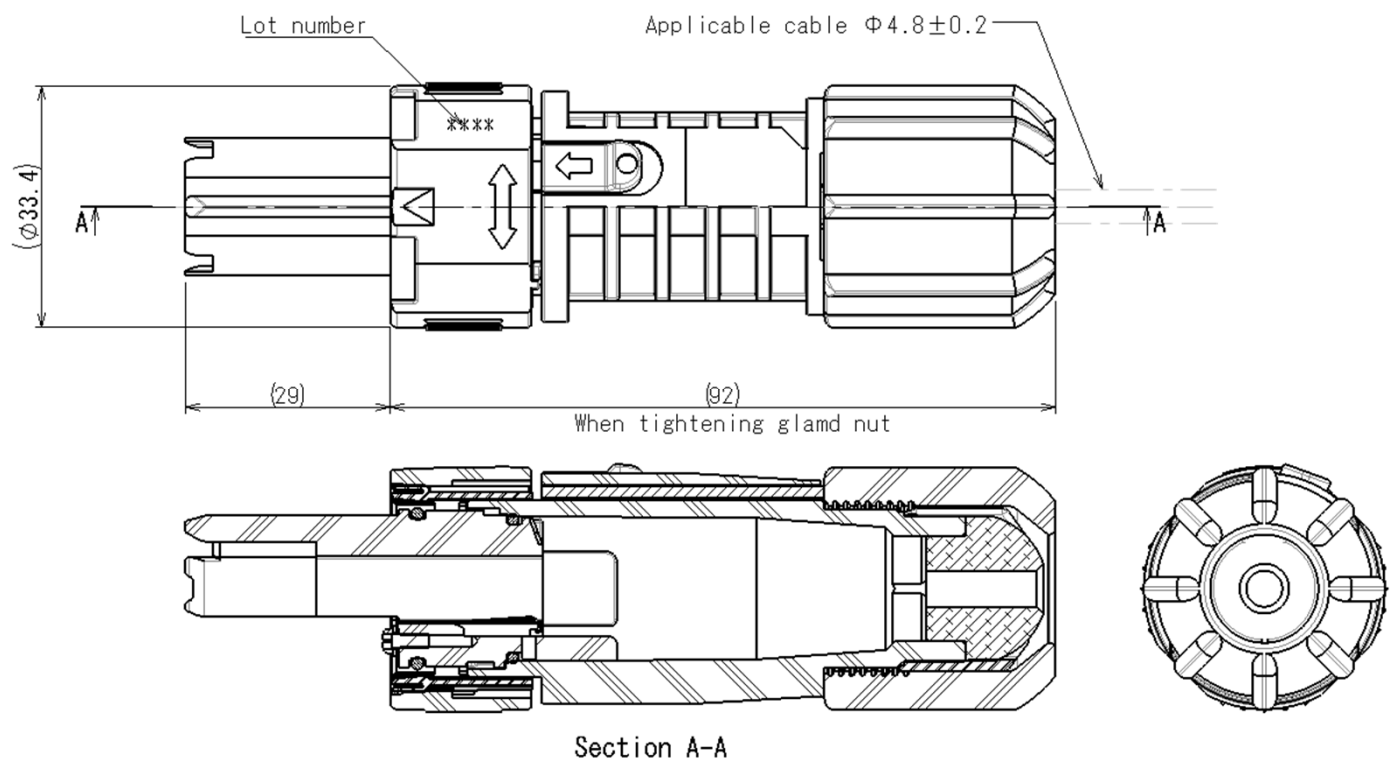
	Specification
Operating Temperature Range	-40 ~ 85 *
Applicable Cable Diameter	ø5mm max (requires optical cable)
Durability	500cycles
Cable Retention	100N min.
Ingress Protection	IPx7 ( in mated condition )
Corrosion resistance	1000h in salt spray

\*For connector only. Cable harness temperature range will depend on cable performance.

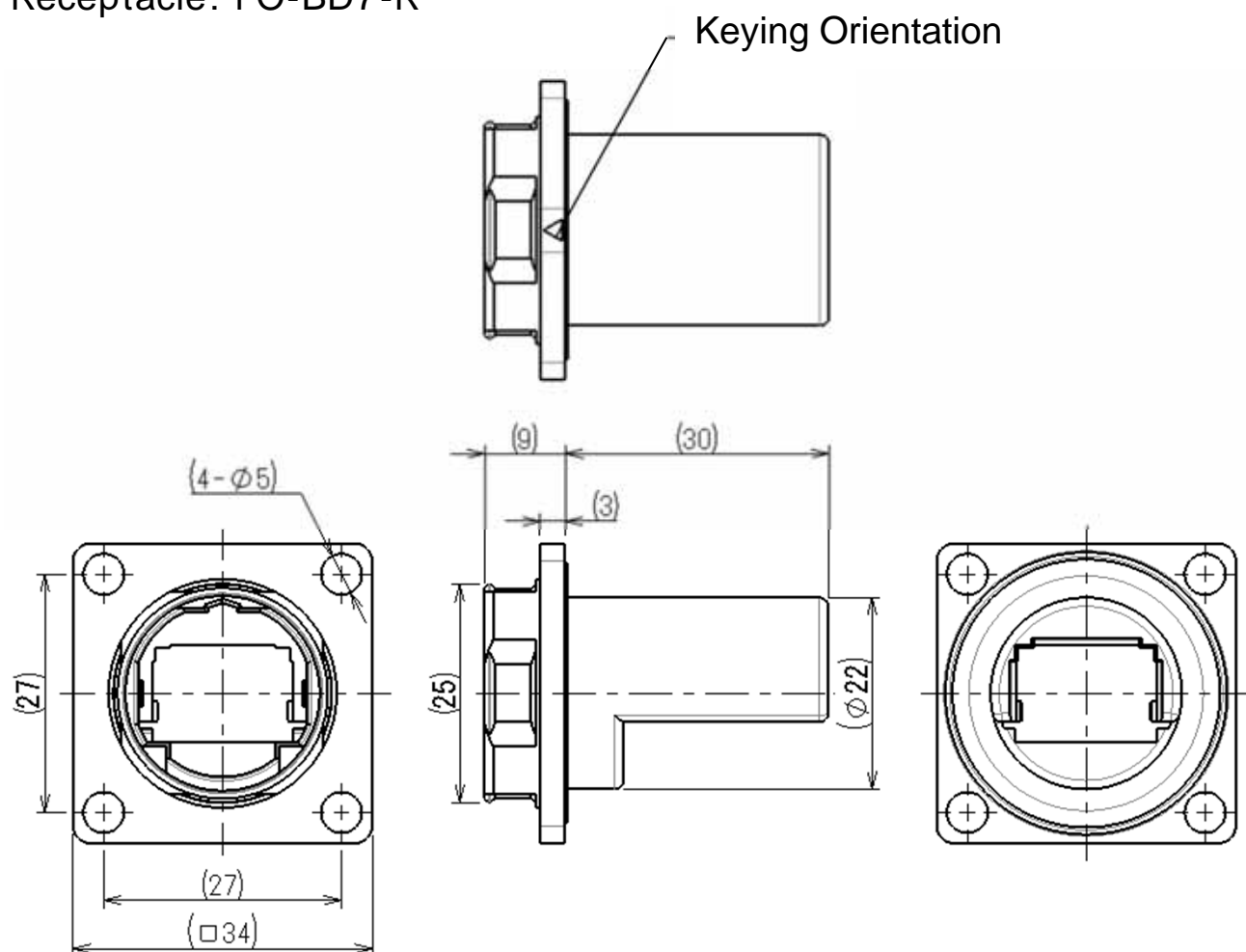
## Material / Finish

Components	Material / Finish
Barrel	Zinc alloy Chrome plating
Gland nut	Waterproof resin
Bushing	Synthetic rubber
O-ring	Synthetic rubber

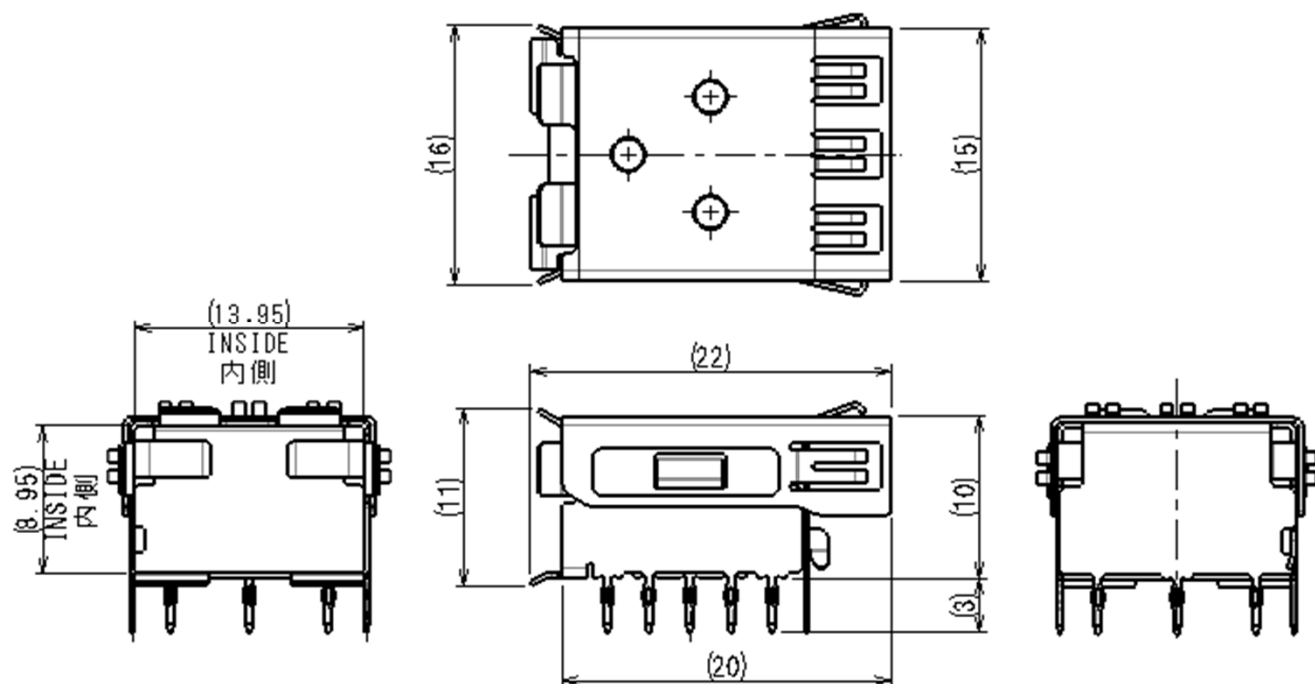
## Plug Assembly: FO-BD7D-P



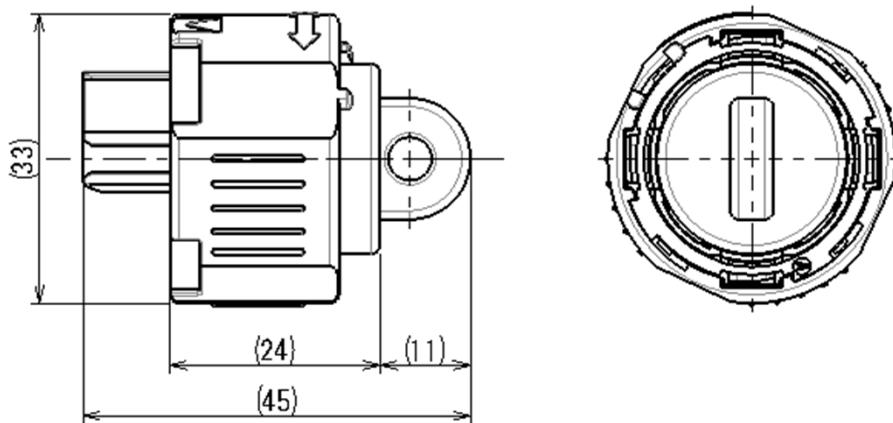
## Receptacle: FO-BD7-R



## Cage: FO-BD7-C



## Waterproof cap for receptacle : FO-BD7-R-DC



### Connector Part Number

	Title	Part Number
Plug	FO-BD7D-P	SJ126067
Receptacle	FO-BD7-R	SJ121366
Cage	FO-BD7-C	SJ121299
Waterproof cap for receptacle	FO-BD7-R-DC	SJ121367

### Technical Documents

Specification	JACS-70378
Instruction Manual	JAHL-70378

#### Notice:

- 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.
- 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.
- 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.
  - Applications that require consultation:
    - 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.
    - 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.
  - Recommended applications include:  
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.