

**NEW**

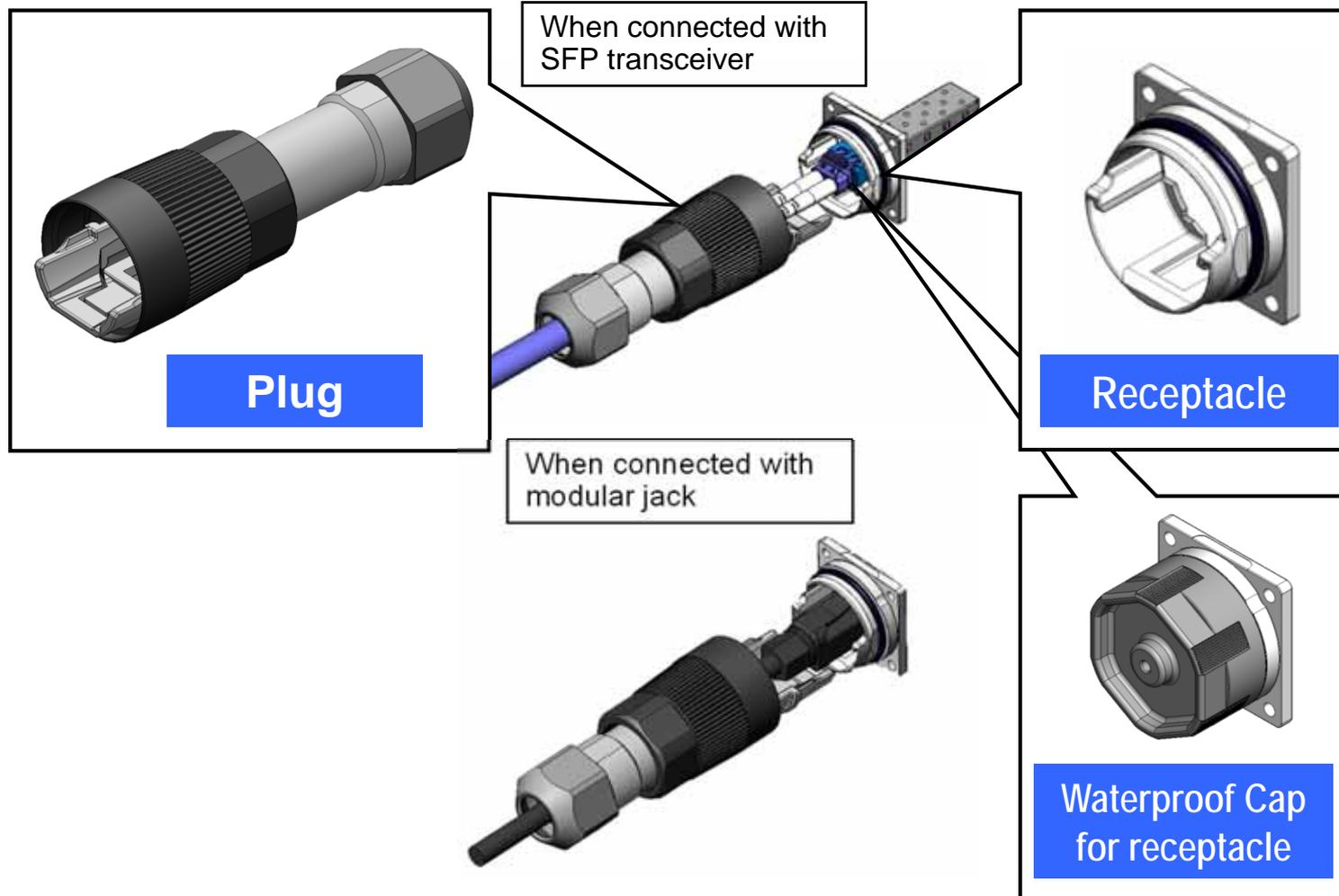


Waterproof I/O Connector to Make Direct Connection with SFP CONNECTOR

# FO-BD2 Series

MB-0278-2

May 2015



## <<Outline>>

The FO-BD2 Series connector is a waterproof I/O connector that can mate directly with the on-board SFP transceiver and modular jack inside the devices. The FO-BD2 Series connector has a superior environmental resistance performance and is ideal for use in a wide range of outdoor applications such as base stations of mobile phones and communication devices.

## Features

- Possible to connect directly to on-board SFP transceivers, modular jacks and others.
- Highly flexible and compatible connections with various types of SFP transceivers, modular jacks and others.
- Assembly of Plug Harnesses can be completed on site as plug can be built-in to existing harnesses.
- Dual lock plug method prevents excessive load on the connections of the inner connector during operation.
- Possible to replace connector as the panel attachment is compatible with TE manufactured FullAXS.
- Environmental resistance performance ideal for outdoor applications.

## General Specifications

Items	Specifications and Performance
Operating Temperature	-40 Deg. C to 85 Deg. C
Applicable Cable	- $\phi$ 7.0mm (Standard Diameter) (FO-BD2-P Plug) - $\phi$ 5.86mm to $\phi$ 7.2 (FO-BD2-P-V2 Plug) - $\phi$ 8.5mm to $\phi$ 10.0 (FO-BD2-P-V4 Plug)
Repeated Mating	500 times
Cable Clamp Strength	100N min. (when each plug is applicable maximum cable diameter)
Dustproof and Waterproof Performance	IP67 (When mated)
Corrosion Resistance	720 hours of salt spray.

## Materials and Finishes

Receptacle: FO-BD2-R

Component	Material / Finish
Shell	Zinc alloy / chromium plating (Note 1)
O Ring	Synthetic rubber

Plug: FO-BD2-P, FO-BD2-P-V2, FO-BD2-P-V4

Component	Material / Finish
Coupling Nut	Zinc alloy / chromium plating (Note 1)
Barrel	Synthetic resin
Ground Nut	Synthetic resin
Bushing	Synthetic rubber
O Ring	Synthetic rubber

Waterproof Cap for Receptacle (without wire rope): FO-BD2-RCAP

Component	Material / Finish
Cap	Synthetic resin

Note 1: Chromium plating: chromium plating (hexavalent chromium free) over nickel over copper.

## Materials and Finishes

Waterproof Cap for Receptacle (with wire rope): FO-BD2-RCAP/WR

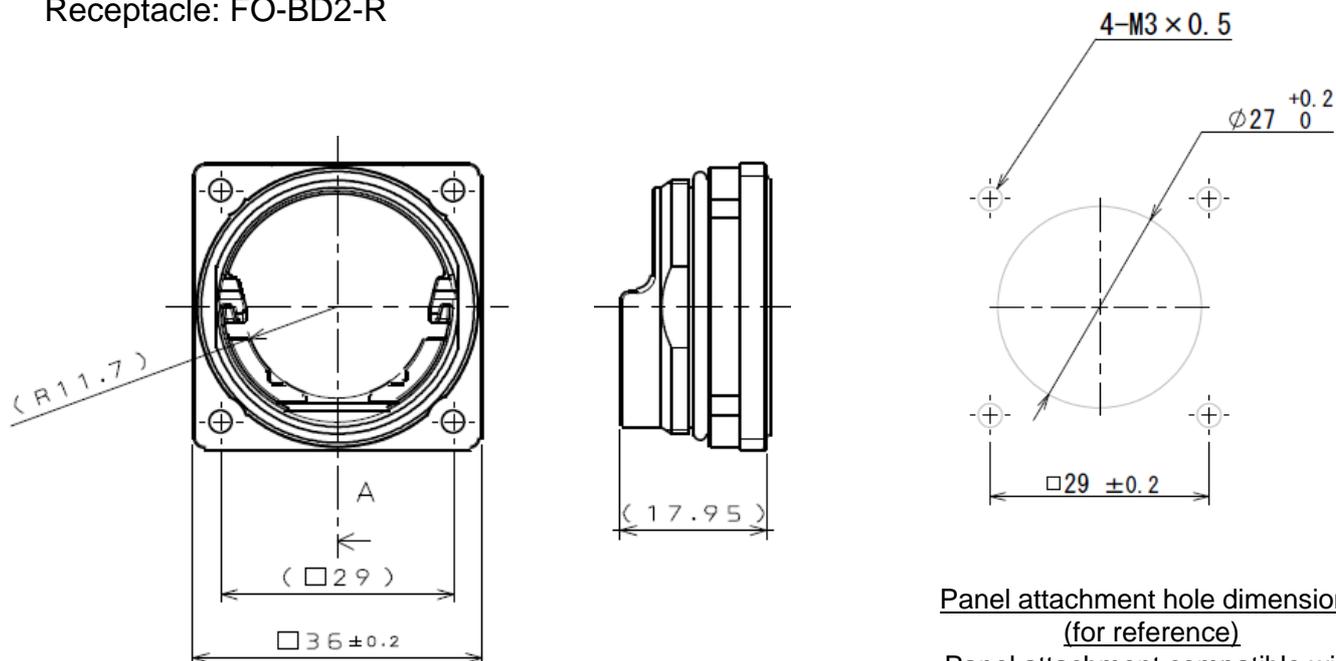
Component	Material / Finish
Cap	Synthetic resin
Tapping Screw	Stainless steel
Wire Rope	Copper alloy / nickel plating, stainless steel

## Part Number List

Type	Part Number	Drawing No.	Specification No.	Handling Instructions	
Receptacle	FO-BD2-R	SJ113293	JACS-70210	JAHL-70210	
Plug (Applicable cable dia.)	φ7.0mm	FO-BD2-P			SJ113292
	φ5.86mm to φ7.2	FO-BD2-P-V2			SJ115669
	φ8.5mm to φ10.0	FO-BD2-P-V4			SJ115958
Waterproof Cap for Receptacle (without wire rope)	FO-BD2-RCAP	SJ114663			
Waterproof Cap for Receptacle (with wire rope)	FO-BD2-RCAP/WR	SJ113294			

## Outer Dimensions

Receptacle: FO-BD2-R

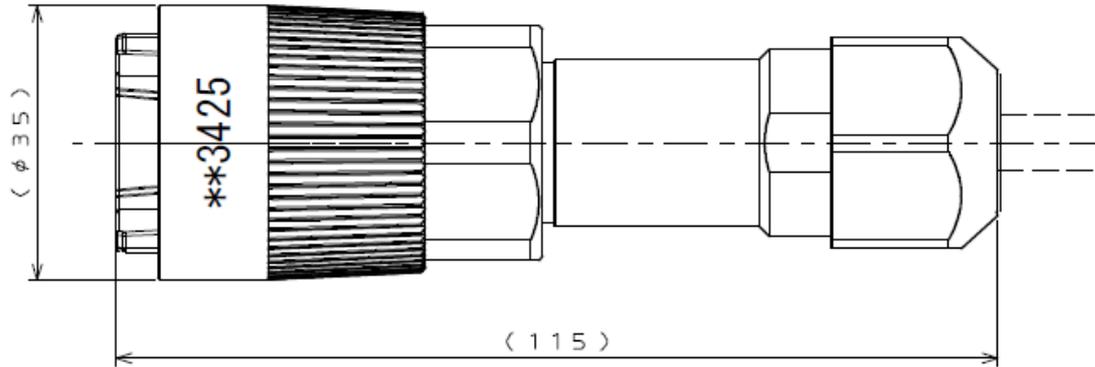


Panel attachment hole dimensions  
(for reference)

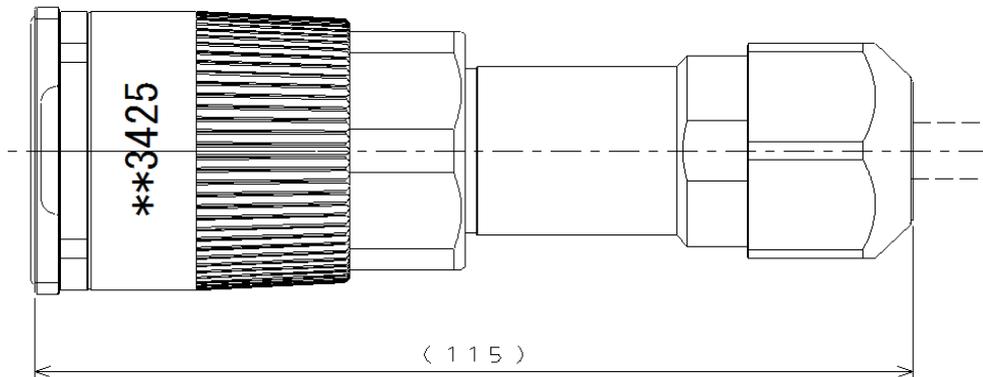
Panel attachment compatible with  
TE manufactured FullAXS.

Outer Dimensions

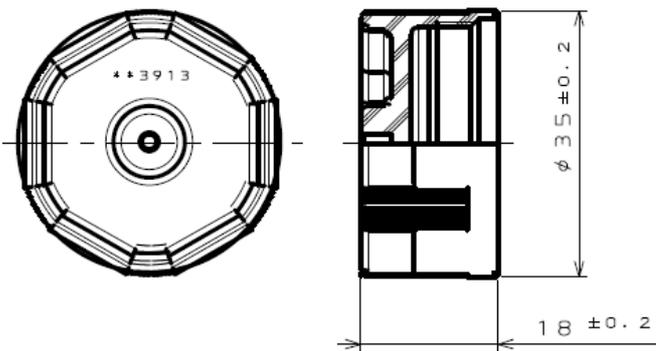
Plug: FO-BD2-P, FO-BD2-P-V2, FO-BD2-P-V4



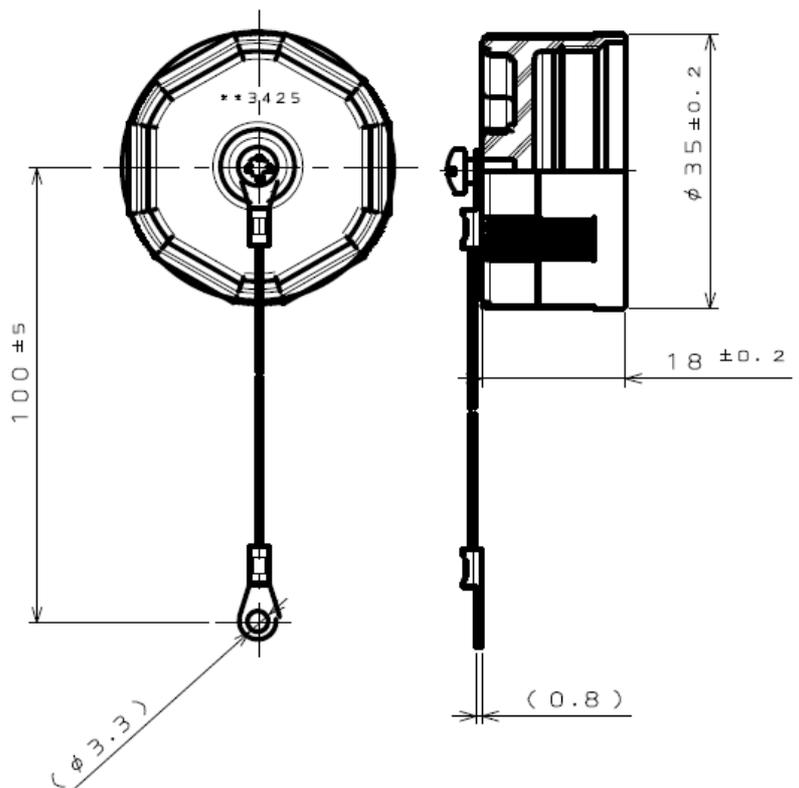
When mated



Waterproof Cap for Receptacle  
(without wire rope):  
FO-BD2-RCAP



Waterproof Cap for Receptacle  
(with wire rope):  
FO-BD2-RCAP/WR



**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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