

**NEW**  


Small Waterproof Optical Multi Pin Push-Pull Connector

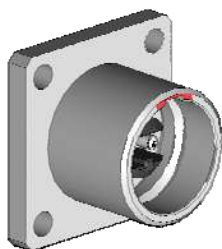
CONNECTOR

MB-0131-3

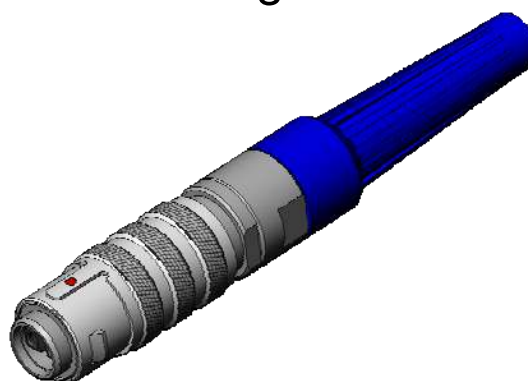
July 2006

**FO-MC Series****RoHS Compliant**

Receptacle



Plug



## Outline

The FO-MC Series connector is a small waterproof optical multi contact connector with IP68 water resistance and push-pull lock mechanism. With superior environment resistance and user friendly design, FO-MC is suitable for medical equipment, communication devices, security cameras and in other outdoor optical transmission system related usage.

**Features**

- Water resistant: IP68 waterproof performance (when mated)
- Two optical contacts in 11mm dia. plug
- Easy, one hand operation of mating/ unmating with push-pull lock
- Click sound assures completion of mating procedure.
- Color variation of plug boot visually prevents mis-mating

**General Specifications**

- No. of contacts: Two optical contacts
- Insertion loss: 0.5dBmax. (when master connector is mated: single point of contact)
- Return loss: 40dB min. (SMF), 25dB min. (MMF)
- Operating temperature: -40 Deg. C to +85 Deg. C
- Waterproof performance: IP68(when mated)
- Durability: 500 mating cycle

|                        |
|------------------------|
| Materials and Finishes |
|------------------------|

## Receptacle

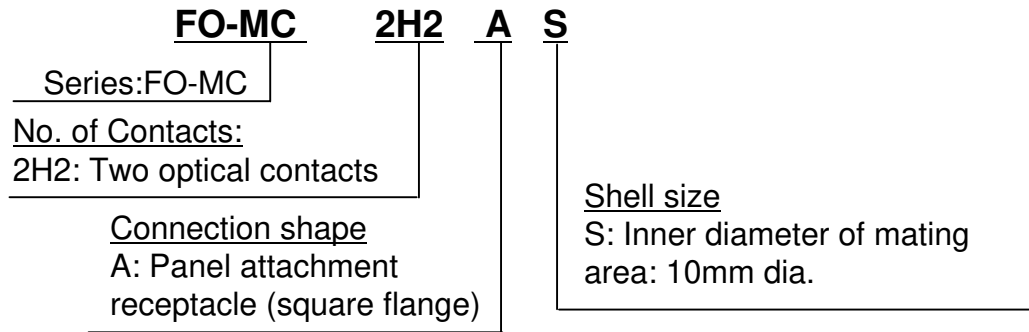
| Components          | Materials and Finishes   |
|---------------------|--------------------------|
| Shell               | Copper Alloy/ Cr plating |
| Insulator           | Glass filled PBT         |
| Ferrule             | Ceramic, Stainless steel |
| Stopper             | Stainless                |
| O Ring (outer side) | Nitrile rubber           |
| O Ring (inner side) | Nitrile rubber           |
| Dust Cap            | EPDM rubber              |

## Plug

| Components      | Materials and Finishes   |
|-----------------|--------------------------|
| Barrel          | Zinc Alloy/ Ni plating   |
| Front Insulator | Glass filled PBT         |
| Rear Insulator  | Glass filled PBT         |
| Coupling Nut    | Copper Alloy/ Cr plating |
| Lock Spring     | Copper Alloy/ Ni plating |
| Bushing         | EPDM rubber              |
| Grand Nut       | Copper Alloy/ Cr plating |
| Cable Clamp     | Copper Alloy/ Ni plating |
| Boot            | Polyester elastomer      |
| Ferrule         | Ceramic, Stainless steel |
| Split Sleeve    | Ceramic                  |
| Spring          | Copper/ Zinc plating     |
| Collar          | Copper alloy             |
| Stop Ring       | Copper alloy/ Ni plating |
| Ring            | Aluminum alloy           |
| Dust Cap        | EPDM rubber              |

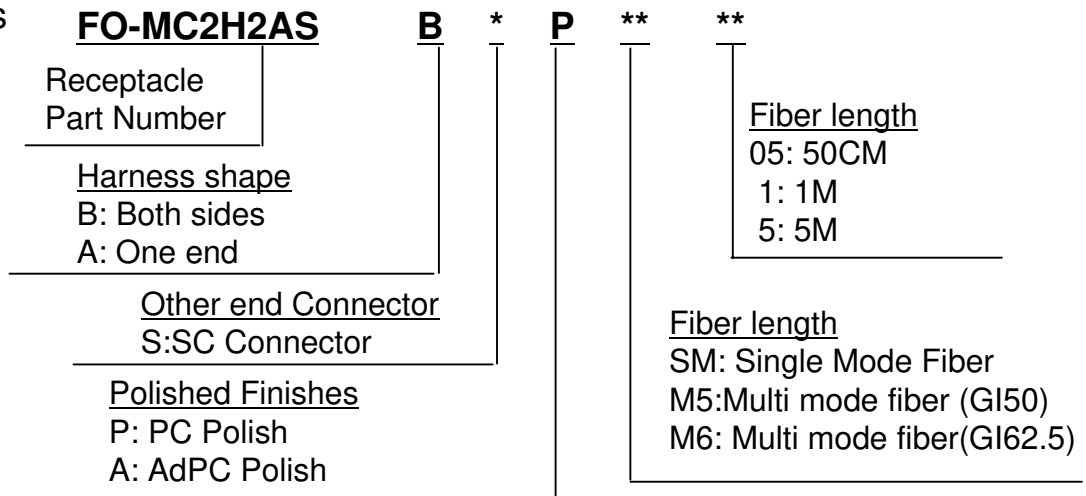
Ordering Information

Receptacle

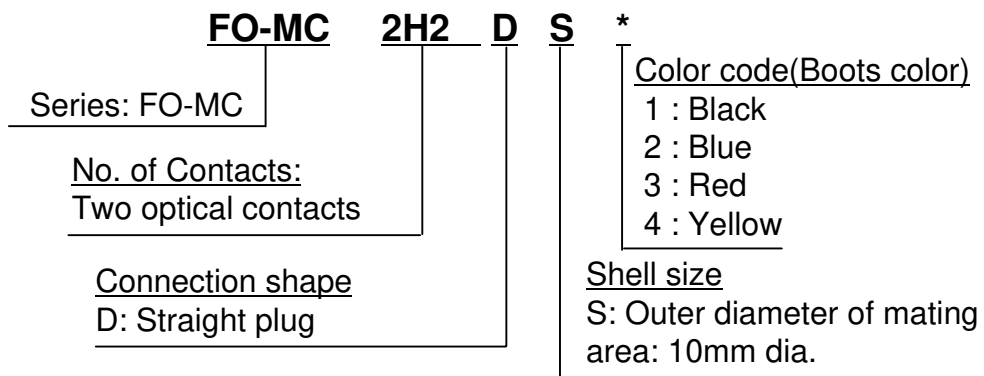


Receptacle:

Harness

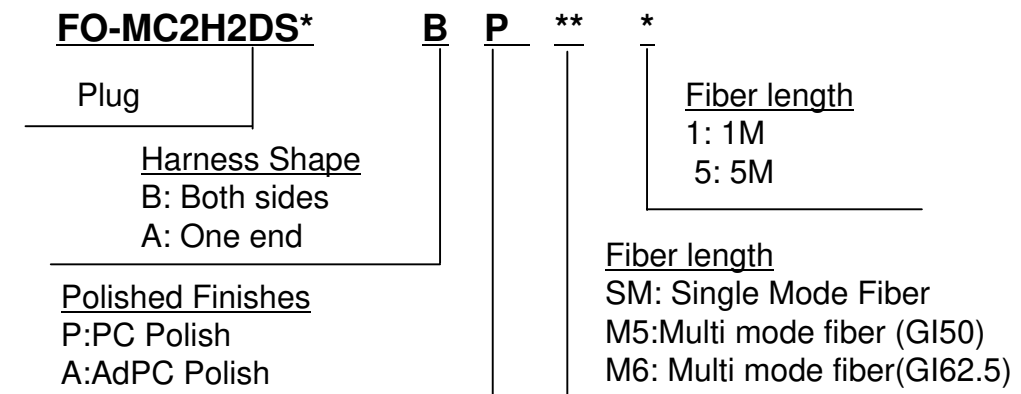


Plug



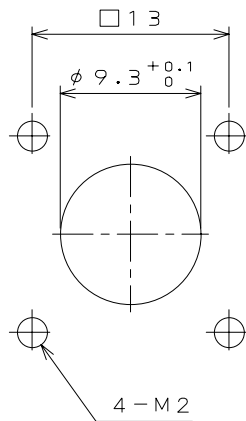
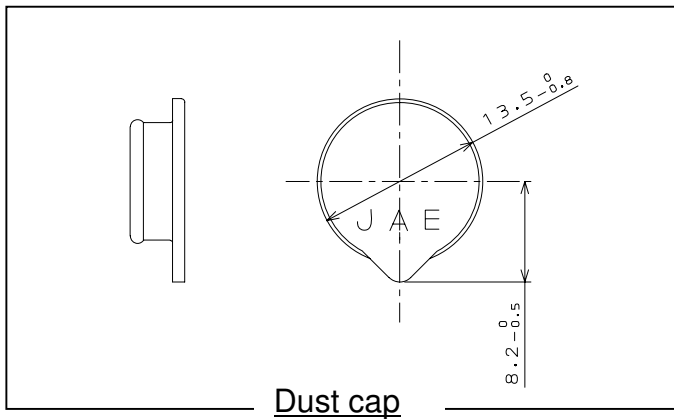
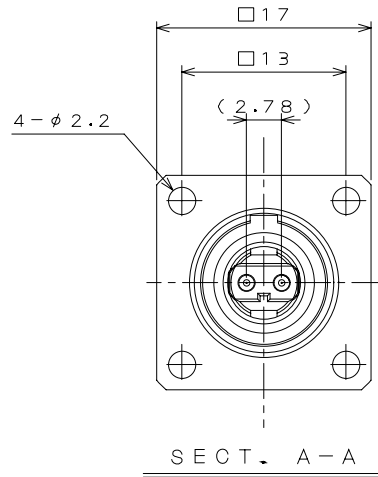
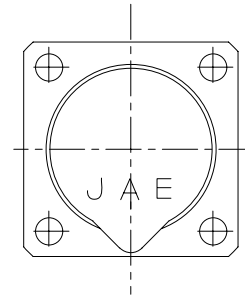
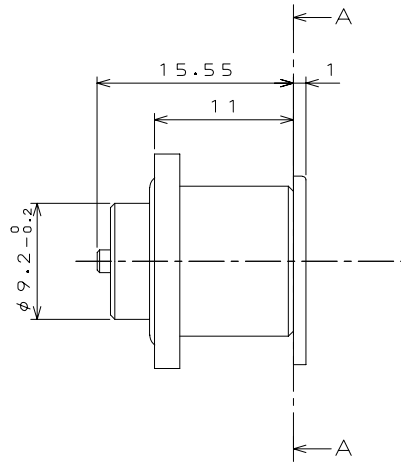
Plug:

Harness



Receptacle

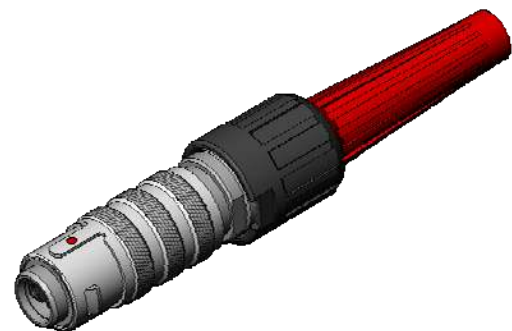
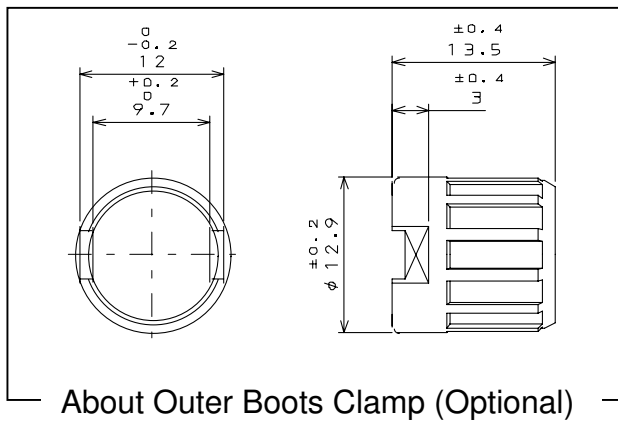
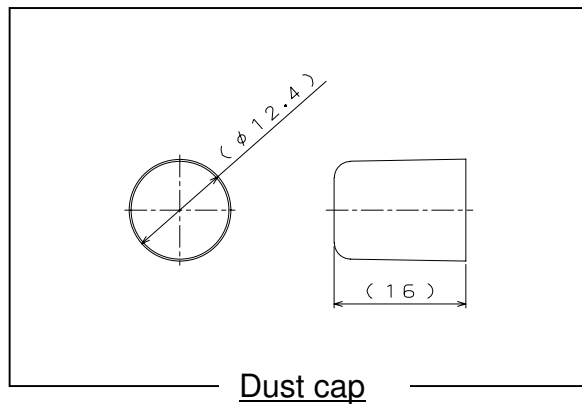
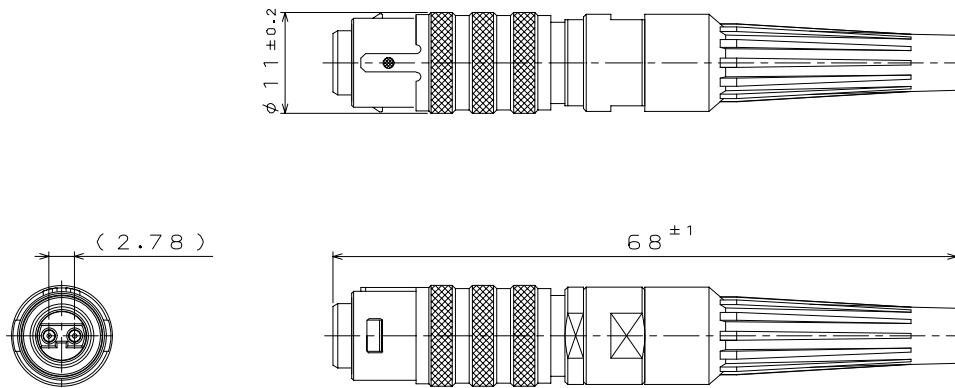
<Part Number: FO-M2H2AS>



Dimension of Panel Cutout  
(for reference)

Plug

<Part Number: FO-MC2H2DS\*>



Outer boots clamp when attached

<Application>

Outer boots clamp can be used as reinforcement to prevent lifting and loosening of boot from extreme bending of cable.

Available with and without outer boots clamp, depending on usage and application.

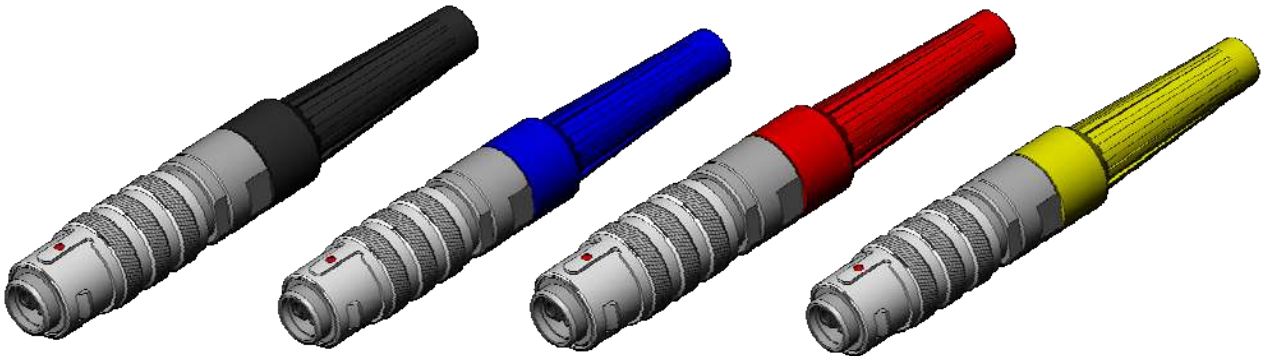
<<Caution>>

Outer boots clamp cannot be removed after assembly.

|            |
|------------|
| Color Code |
|------------|

Plug: Boots

Black, Blue, Red, Yellow (4 colors)



|                      |
|----------------------|
| Technical References |
|----------------------|

\*Please contact us concerning products other than the following.

\*Please consult us concerning length and fiber type of cable assembly products.

|            | Part Number | SJ Drawing | JACS       |
|------------|-------------|------------|------------|
| Receptacle | FO-MC2H2AS  | SJ103039   | JACS-70026 |
| Plug       | FO-MC2H2DS* | SJ103040   | JACS-70026 |

## Japan Aviation Electronics Industry, Limited

Product Marketing Division  
 Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539  
 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946

**Notice:** Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.