

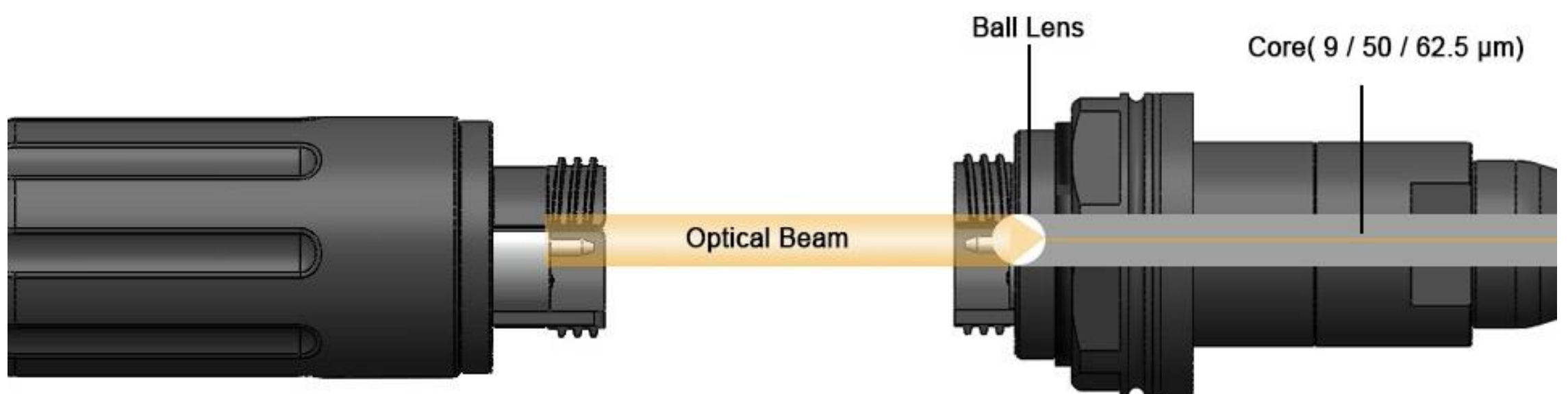
# FOBEX

- FOSTEC EXPANDED BEAM CONNECTOR-

## ABOUT FOBEX

FOBEX is an Expanded Beam connector which is non-contact type optical connector. It is convenient for tactical operation and maintenance. It is usually used in outdoor circumstances such as Military, Ship, Offshore, Broadcast, Mining, Railway and Oil & Gas Plant industries. FOBEX have excellent waterproof, dustproof properties(IP68), durability for strong vibration and external impact. This product is the best and ideal solution for harsh environments applications wherein optical interferences can become contaminated potentially causing damages to telecommunication network system.

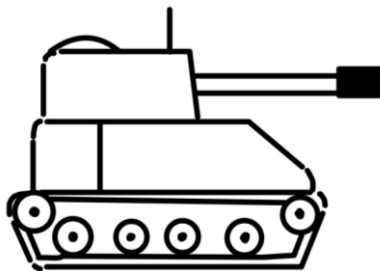
FOBEX 83526 has hermaphroditic structure. The Plug to Plug & Plug to Receptacle can be directly connected with each other without adaptors. It offers large number of mating cycles and superb performance.



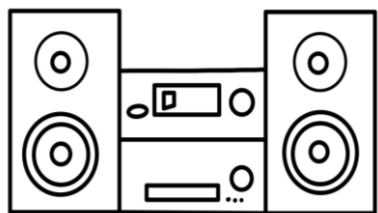
APPLICATION

- Mission Critical Combat and Communication Systems
- Mobile Tactical Shelters Electronic Battlefield Networks
- Navy shipboard, Surface Craft and Submarines
- Mining and Tunneling Equipment
- Offshore, Subsea System
- Oil and Gas Plant industries
- Communicating and control system for Railway

Defense



Broadcast



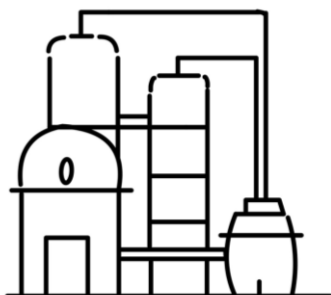
Ship



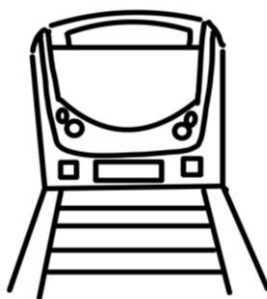
Mining



Oil & Gas Plant



Railway

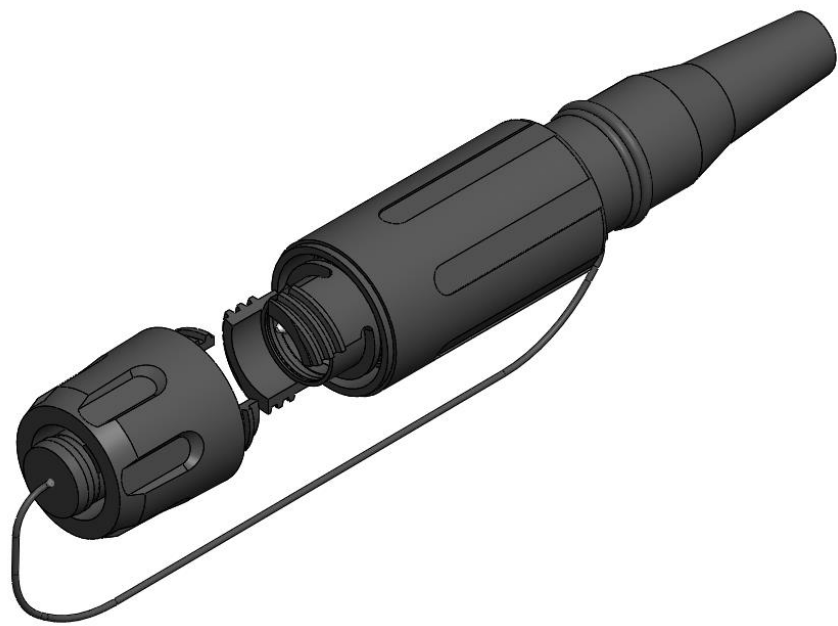
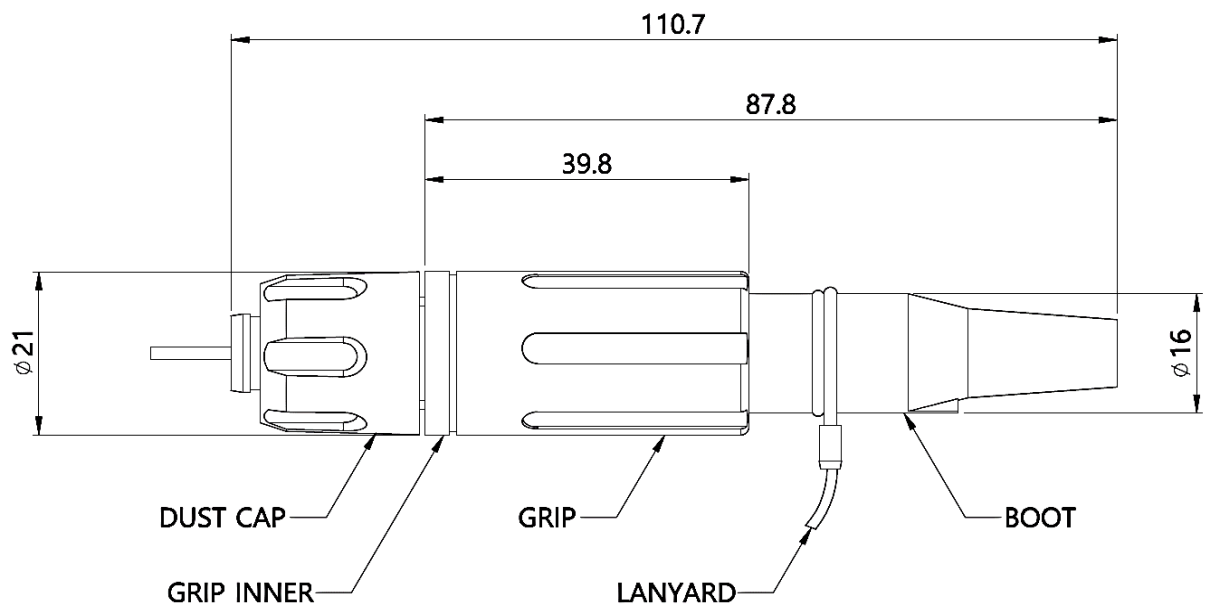


SPECIFICATION

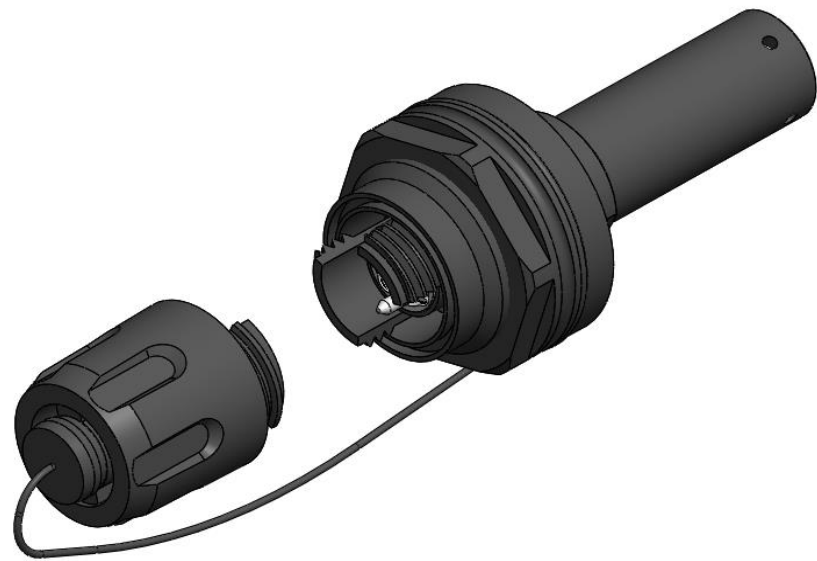
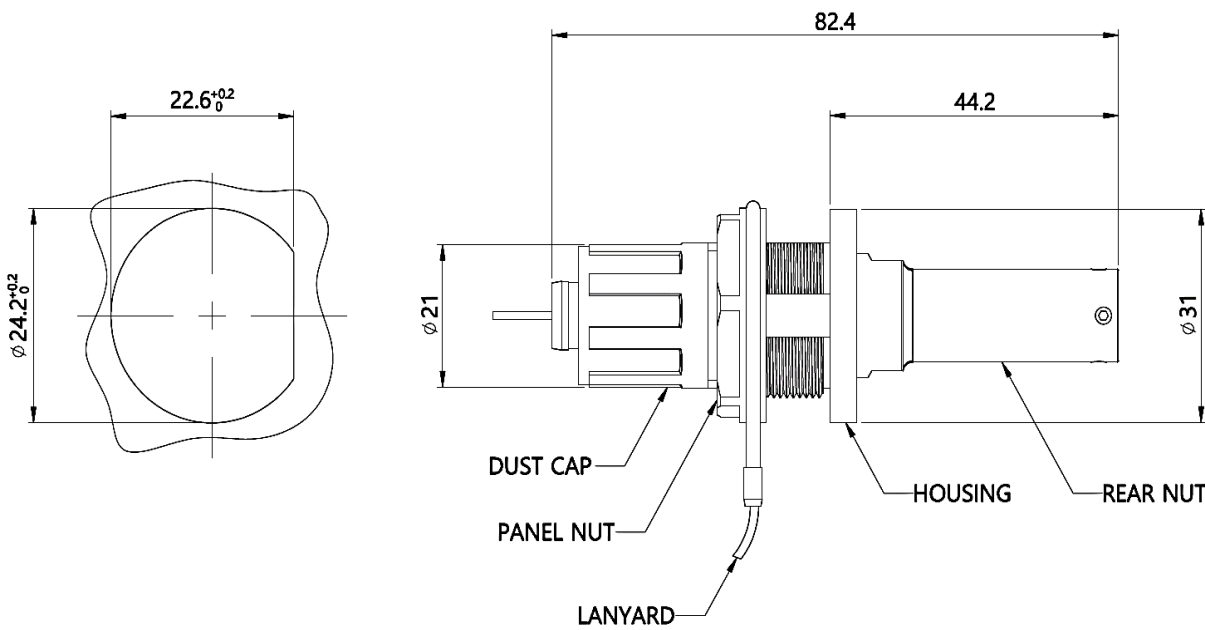
| Parameter             | Multimode(@850nm/1300nm)                                            | Single mode(@1310nm/1550nm)                                                                                                         |
|-----------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Insertion Loss        | 1 to 4 channels 0.5 - 1.0dB Max<br>6 to 24 channels 0.5 - 1.5dB Max | 1 to 4 channels 1.0(typical) - 1.5dB Max<br>6 to 12 channels 1.0(typical) - 2.0dB Max<br>16 to 24 channels 1.0(typical) - 2.5dB Max |
| Return Loss           | > 20dB                                                              | > 34dB(typical 40dB)                                                                                                                |
| Operating temperature | -40°C to +85°C                                                      |                                                                                                                                     |
| Storage temperature   | -55°C to +85°C                                                      |                                                                                                                                     |
| Durability            | 3000 matings                                                        |                                                                                                                                     |
| Water Immersion       | IP68                                                                |                                                                                                                                     |
| Free Fall Resistance  | 500 Falls from 1.2m height                                          |                                                                                                                                     |
| Vibration             | 20-500Hz, 3 directions, 0.75mm amplitude @10g acceleration          |                                                                                                                                     |
| Cable Retention       | 1500N(Cable Dependant)                                              |                                                                                                                                     |

FOBEX MINI CONFIGURATION

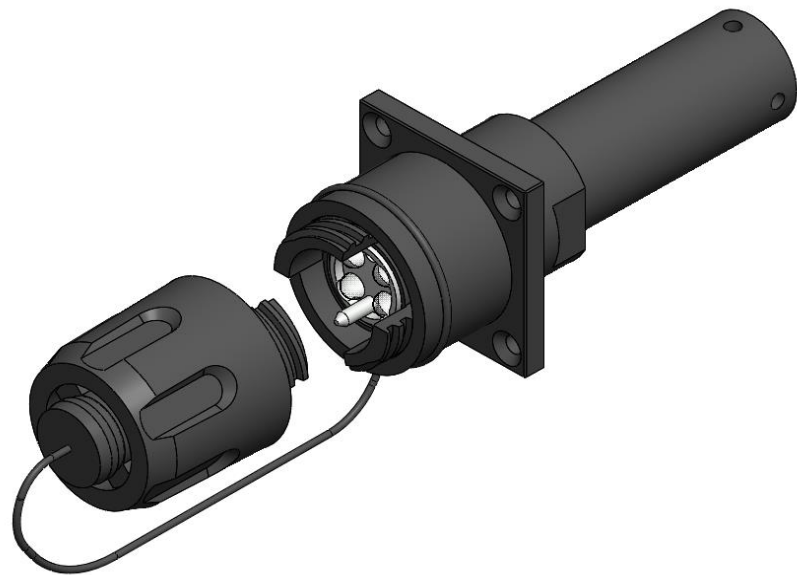
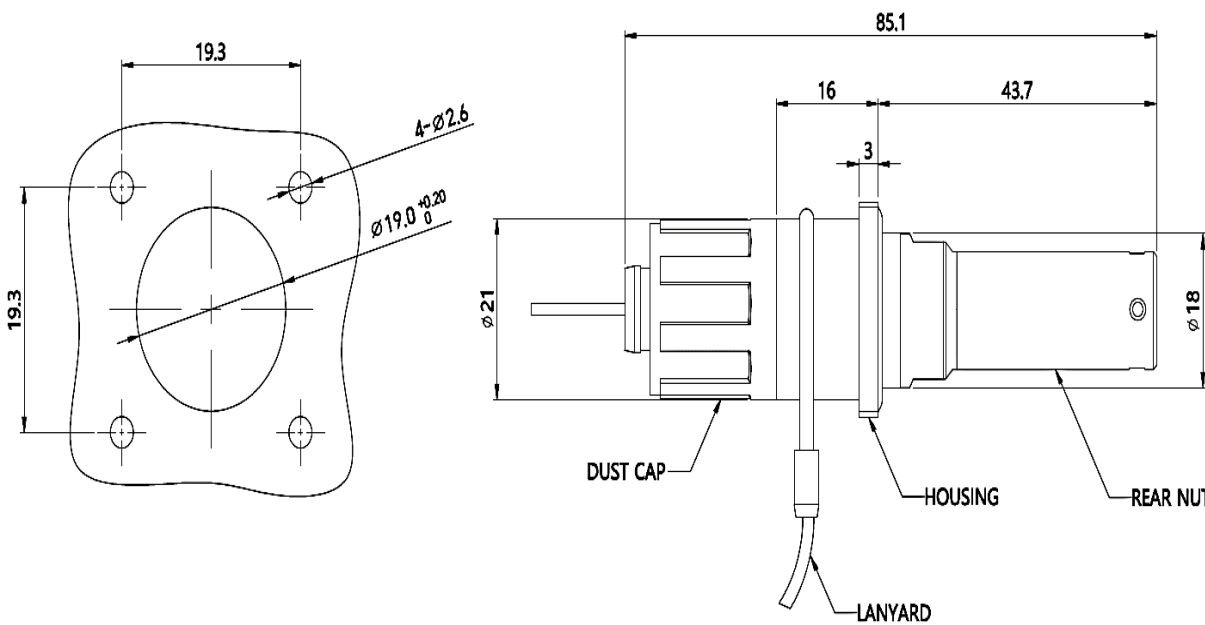
STRAIGHT PLUG TYPE



BULKHEAD D-HOLE TYPE

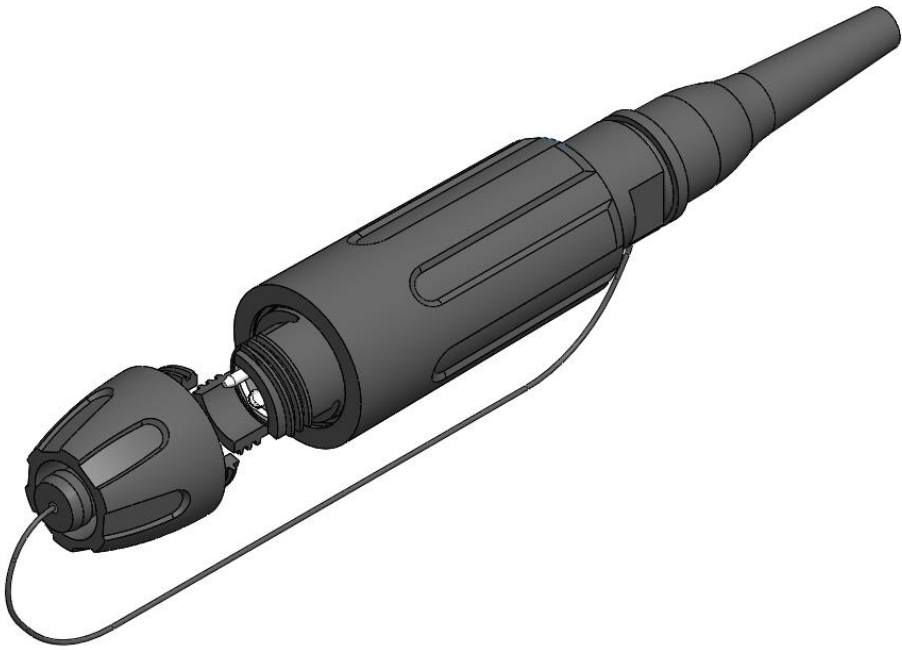
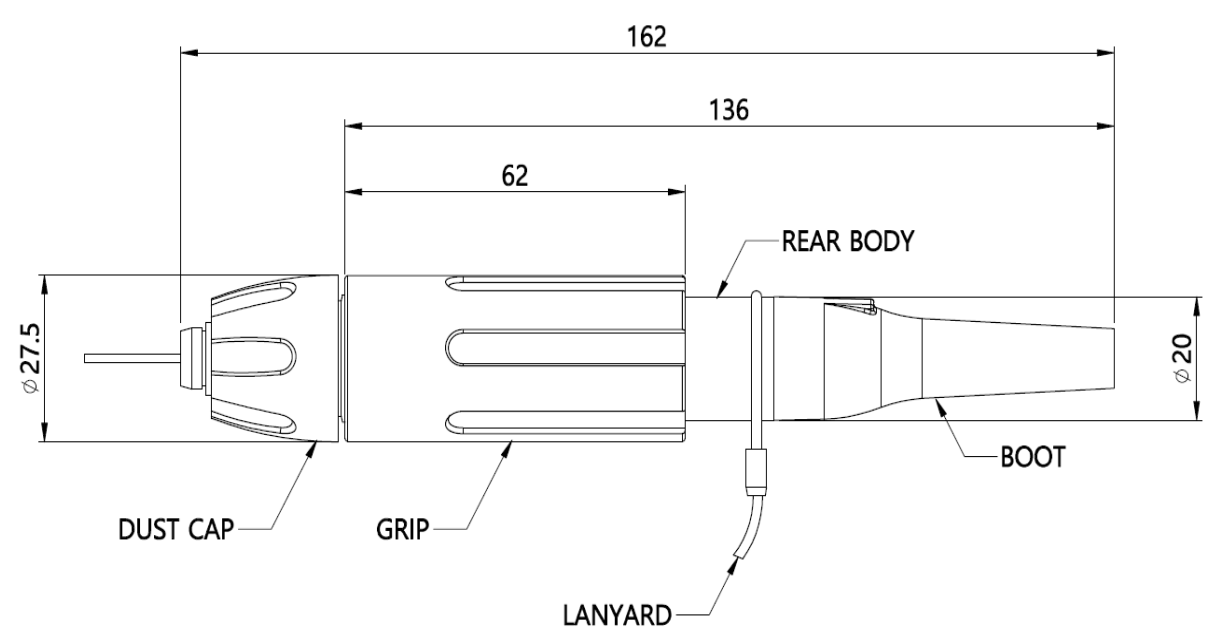


BULKHEAD SQUARE FLANGE TYPE

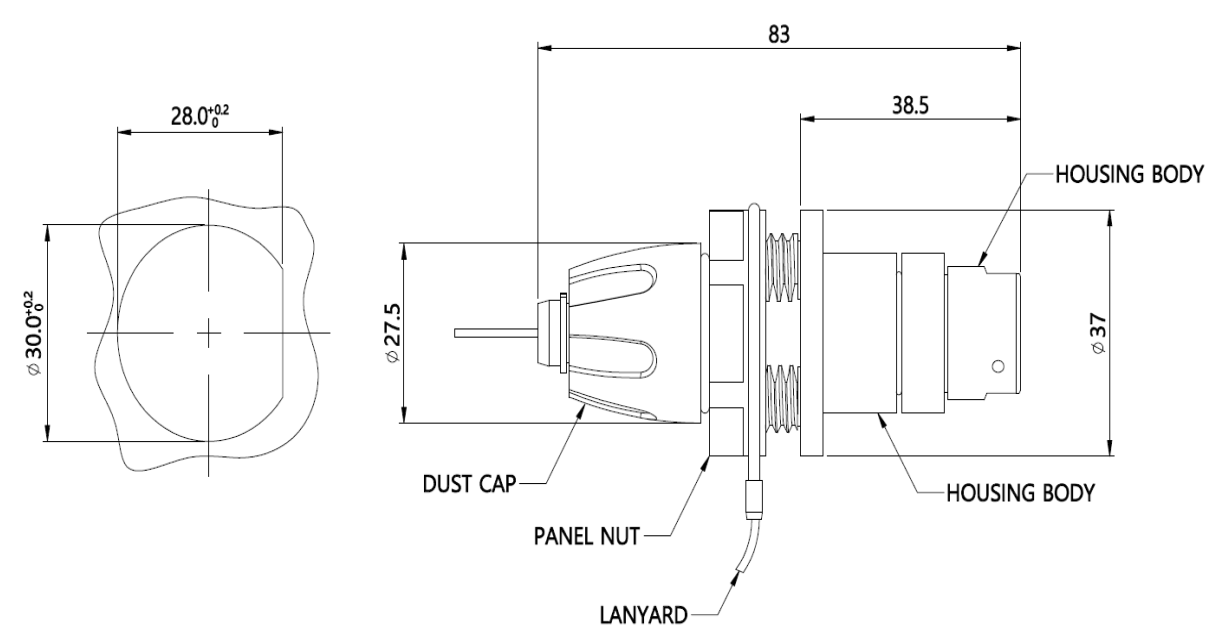


# FOBEX JUNIOR CONFIGURATION

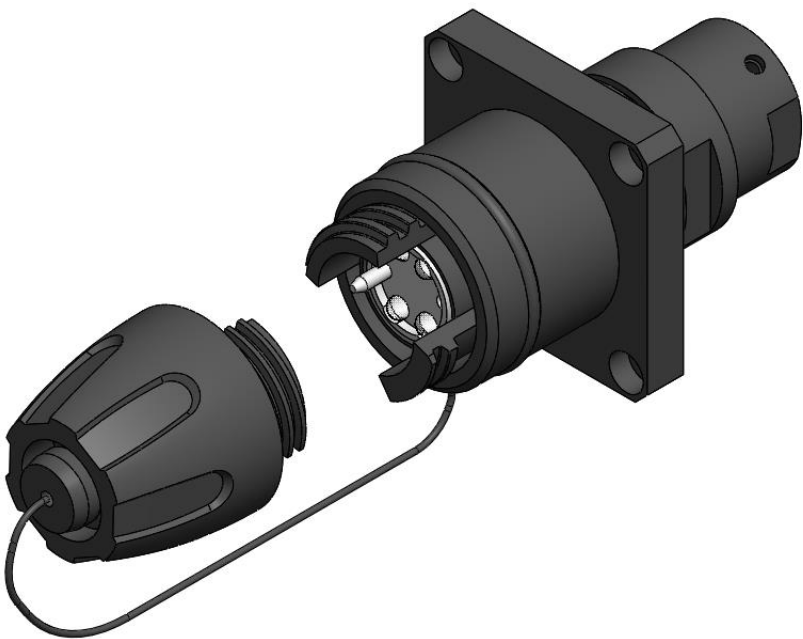
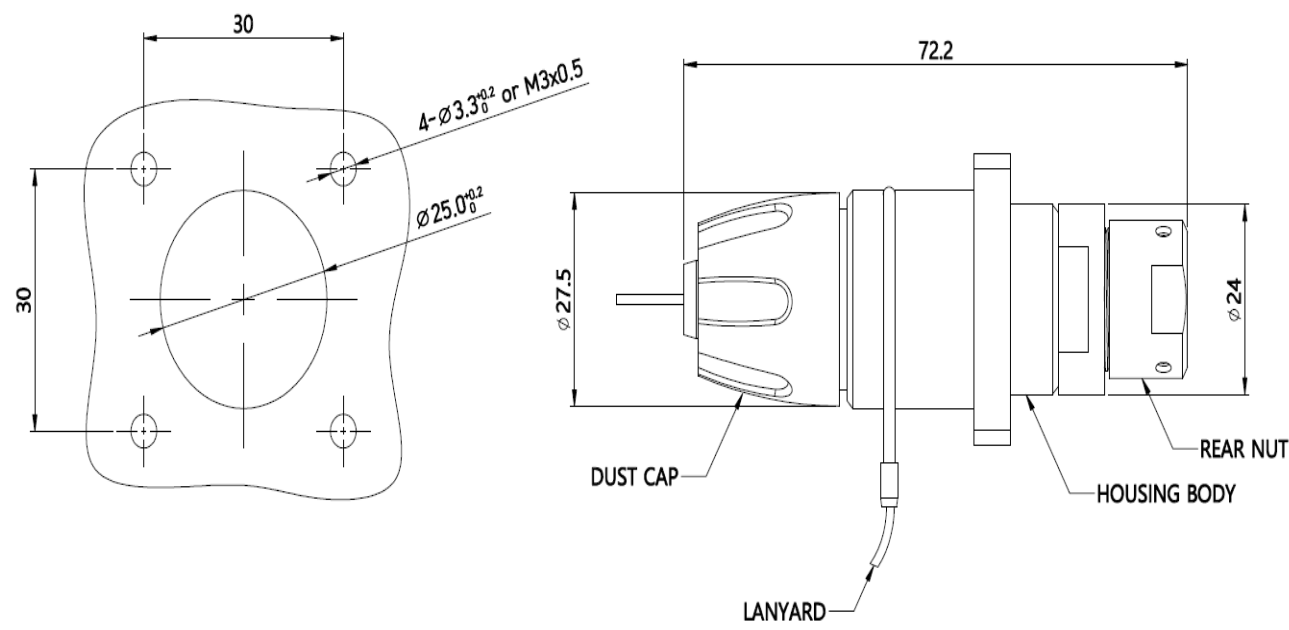
## STRAIGHT PLUG TYPE



## BULKHEAD D-HOLE TYPE

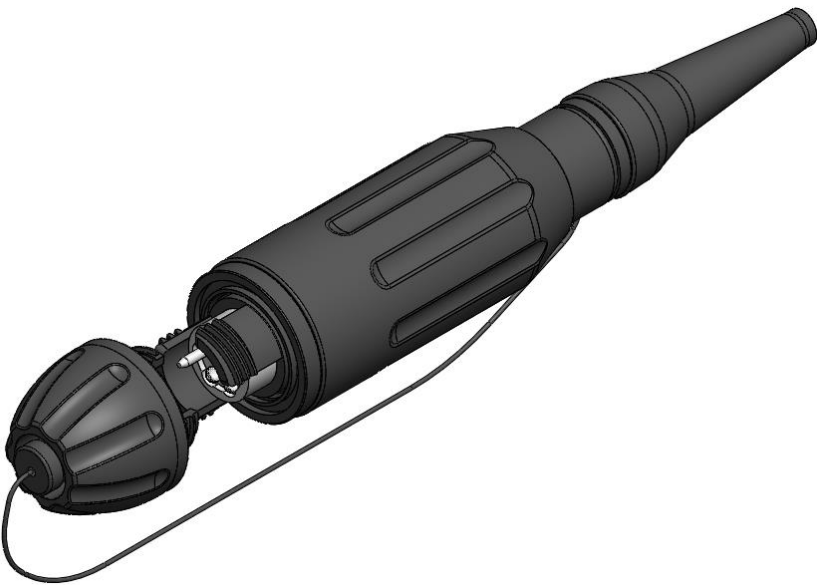
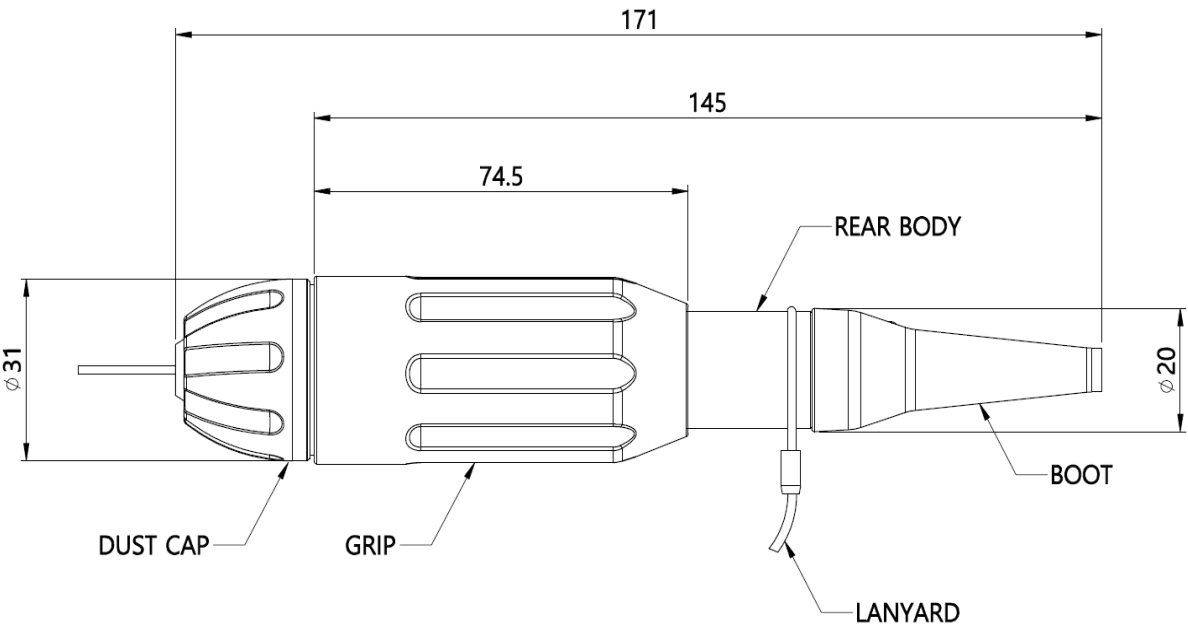


## BULKHEAD SQUARE FLANGE TYPE

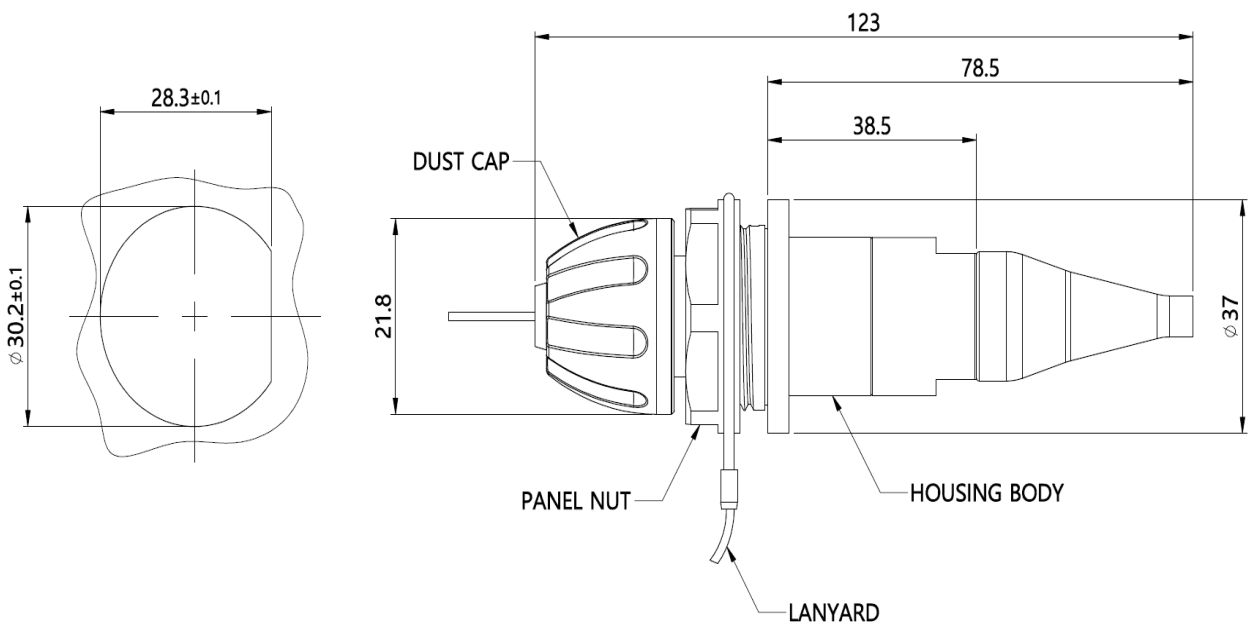


FOBEX SENIOR CONFIGURATION

STRAIGHT PLUG TYPE

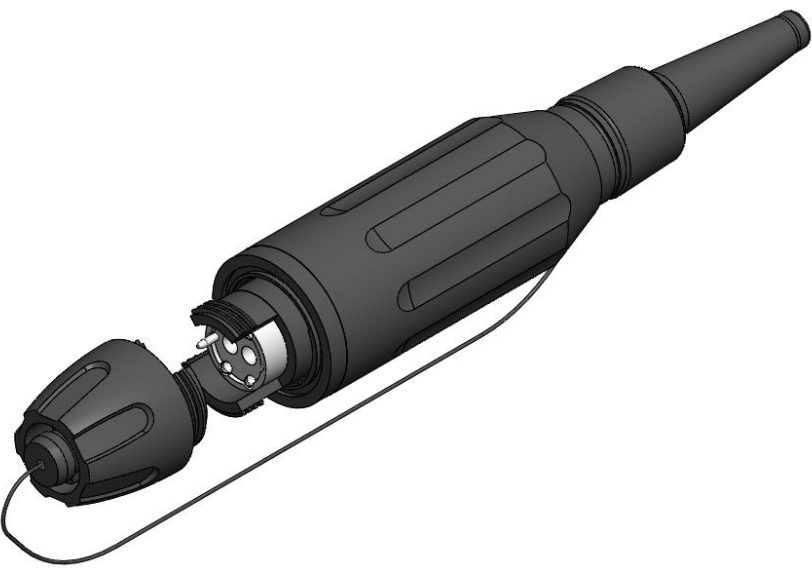
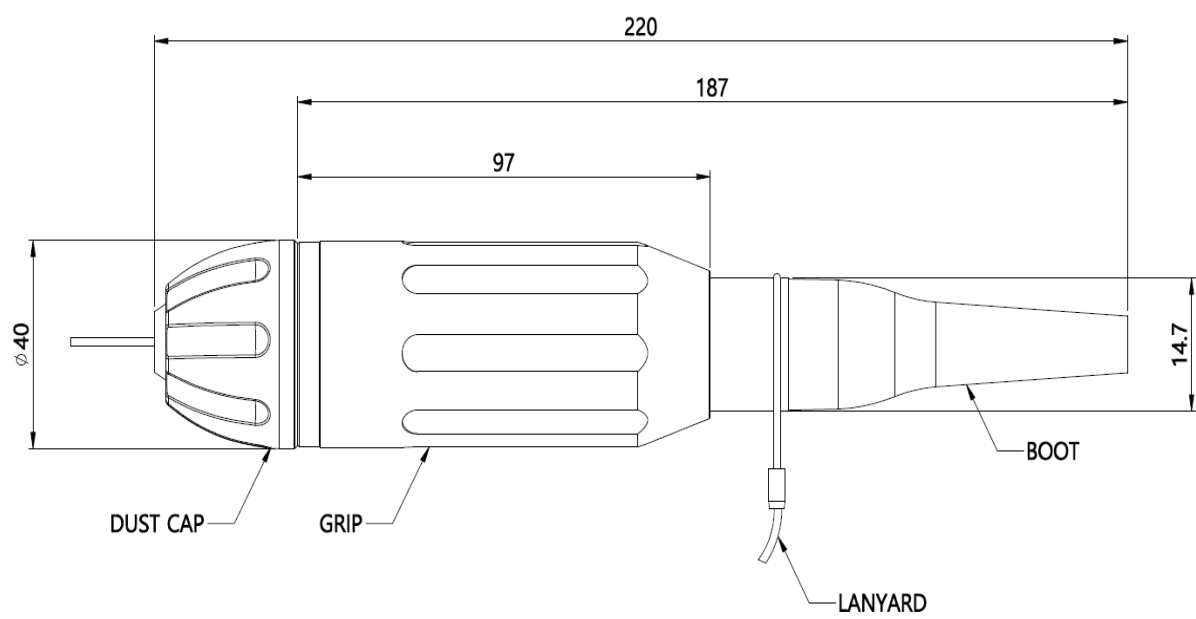


BULKHEAD D-HOLE TYPE

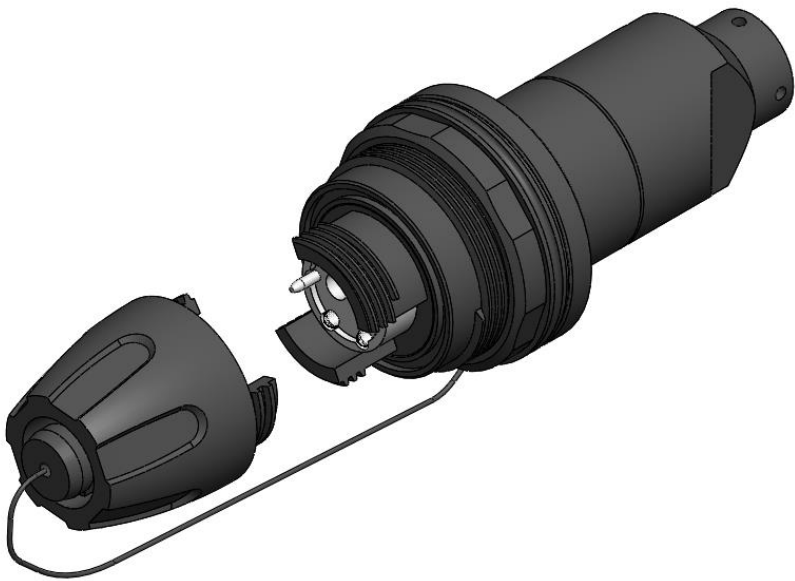
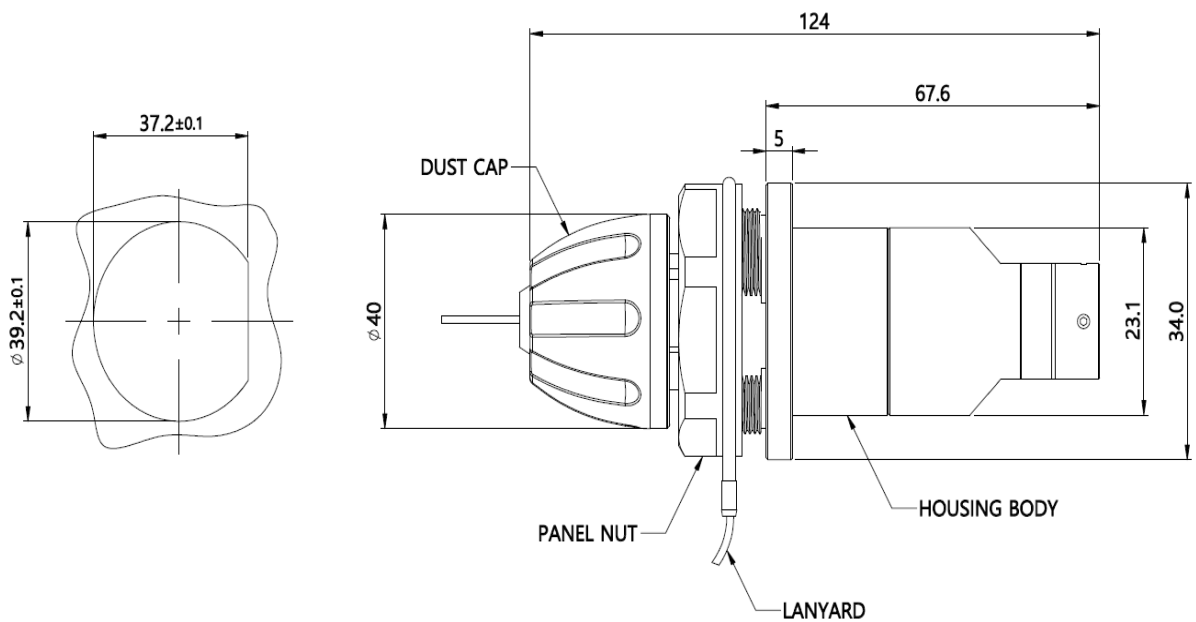


FOBEX MAXI CONFIGURATION

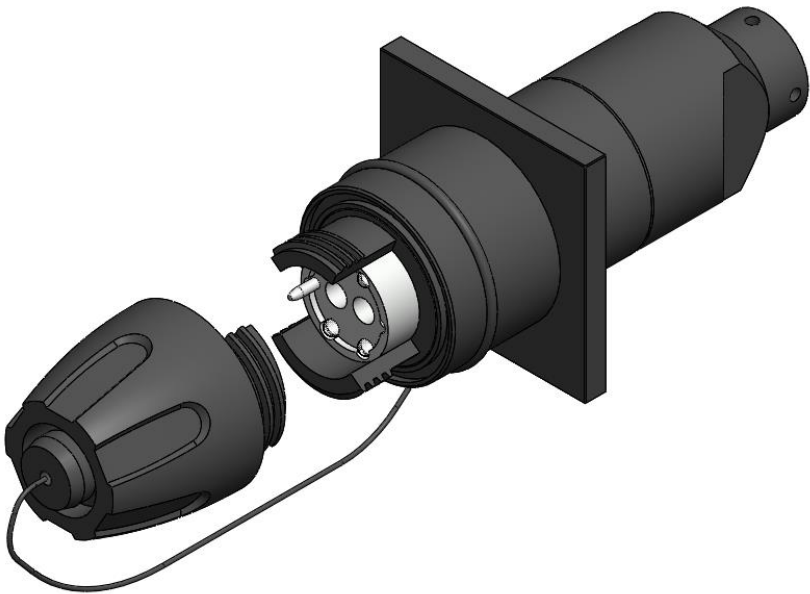
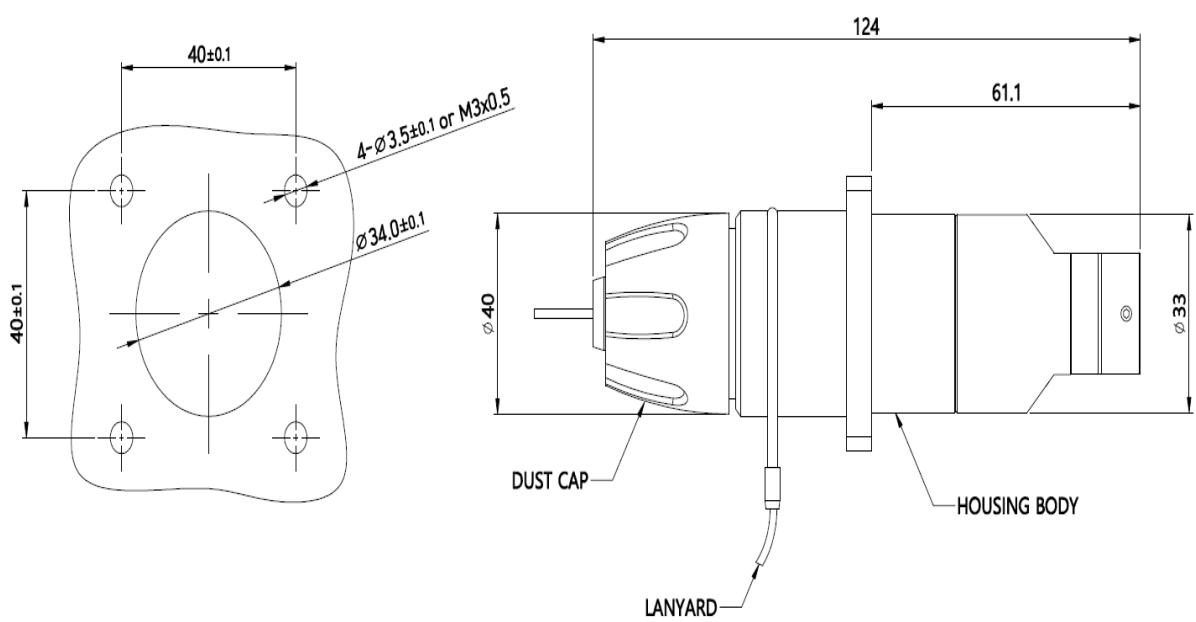
STRAIGHT PLUG TYPE



BULKHEAD D-HOLE TYPE



BULKHEAD SQUARE FLANGE TYPE



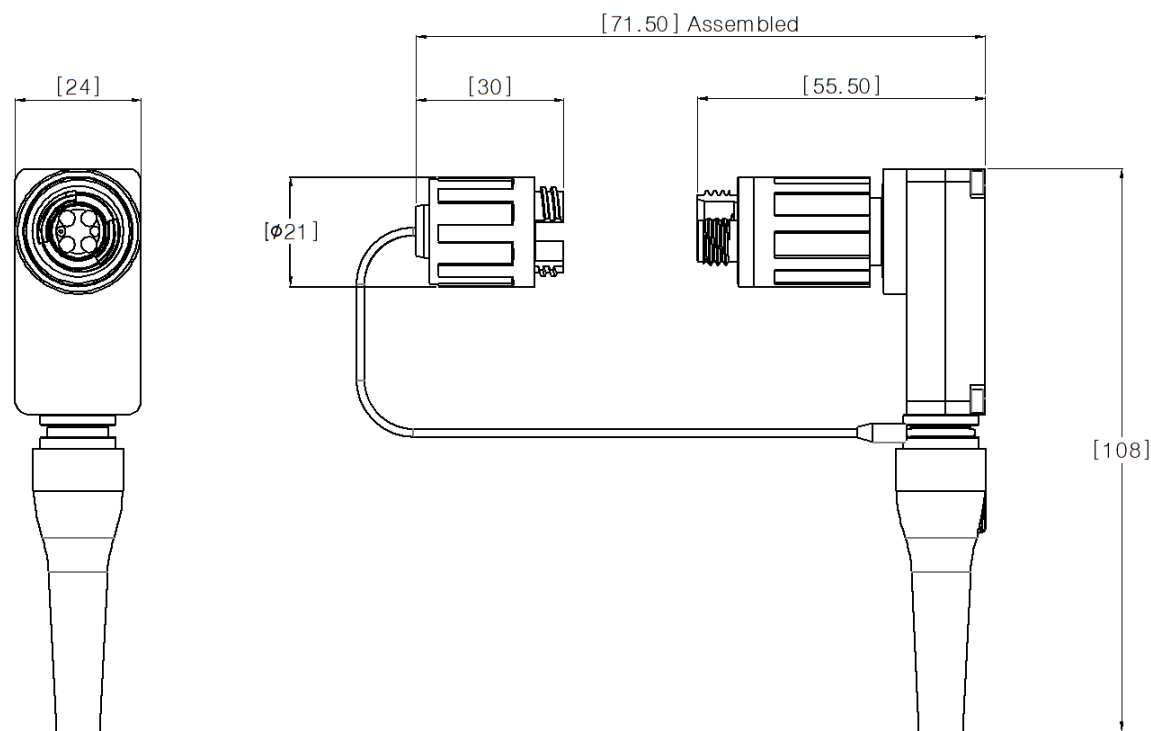
## FOBEX 90° BACK SHELL FOR MINI & JUNIOR

This 90° back shell option is the best solution for application with limited space. The front housing can be assembled with the back shell each 45° angle for diverse customization. The key will be fixed after assembly to avoid any risk from cable weakness. This back shell can be compatible with Mini and Junior size and also can be applied for both Plug and Receptacle connectors.

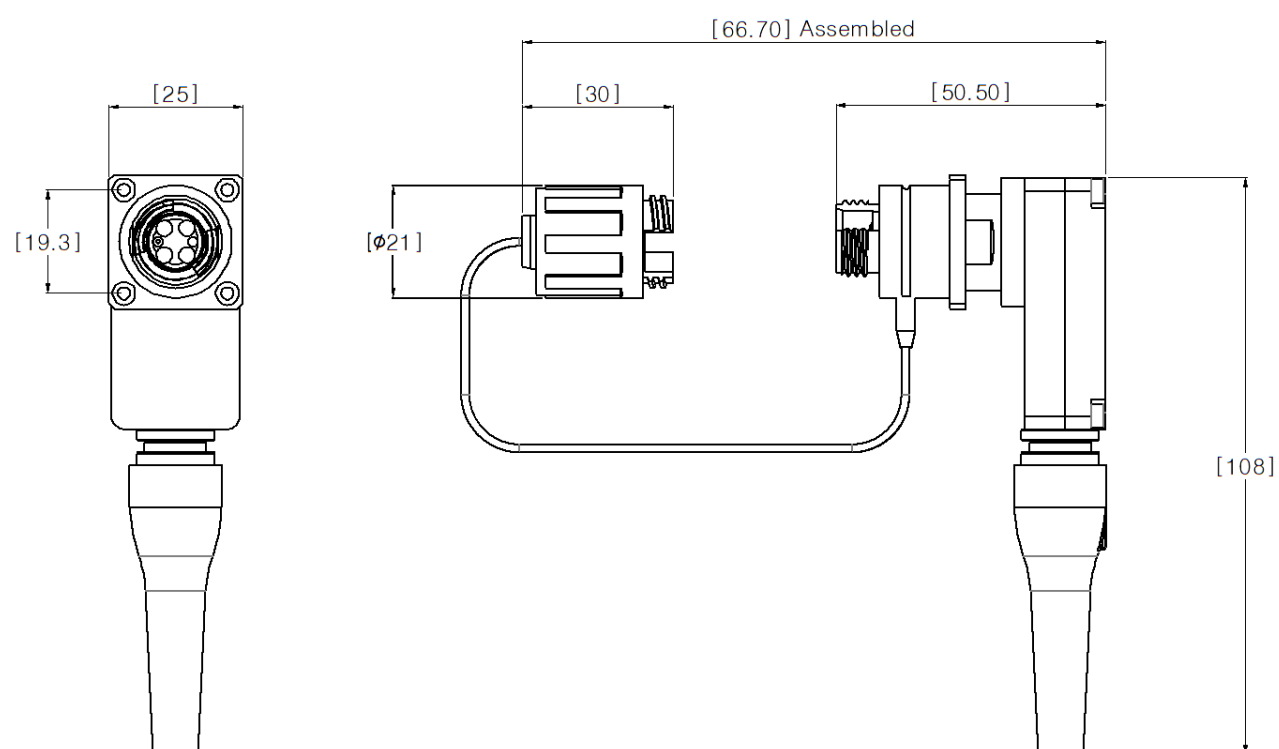
### KEY ROTATION



### PLUG TYPE

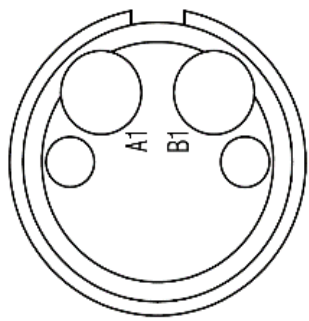


### RECEPTACLE TYPE

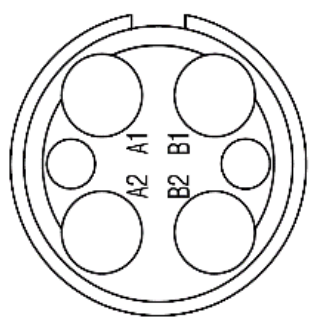


CHANNEL OPTIONS

MINI SIZE

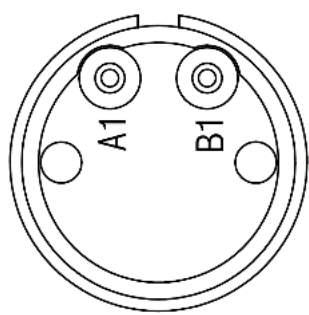


2 Channel

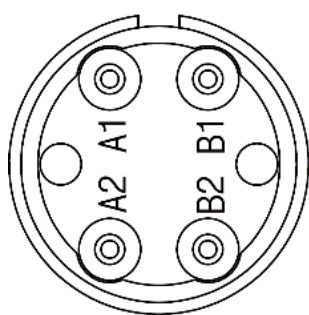


4 Channel

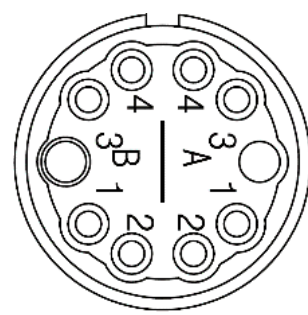
JUNIOR SIZE



2 Channel

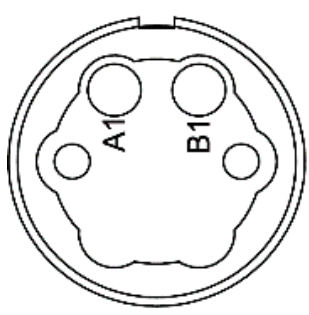


4 Channel

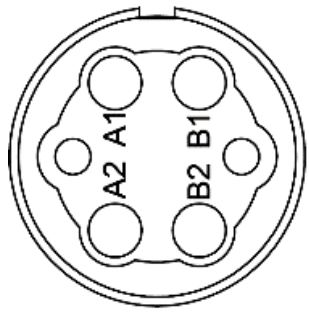


8 Channel

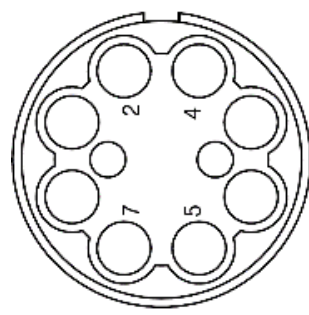
SENIOR SIZE



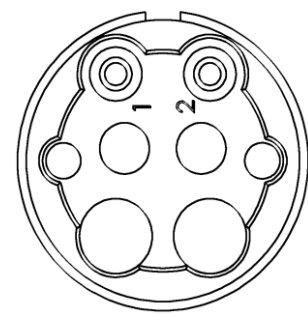
2 Channel



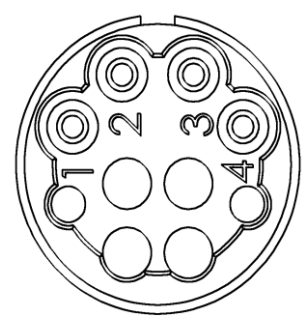
4 Channel



8 Channel

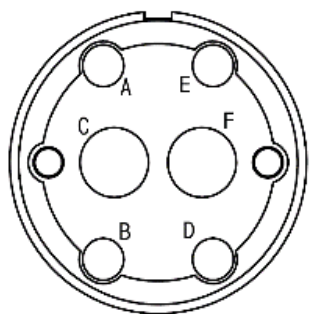


2Ch optical  
4Ch Electrical

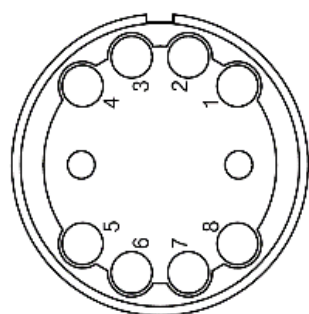


4Ch optical  
4Ch Electrical

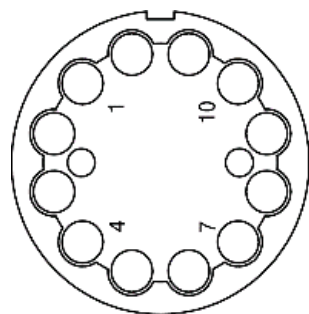
MAXI SIZE



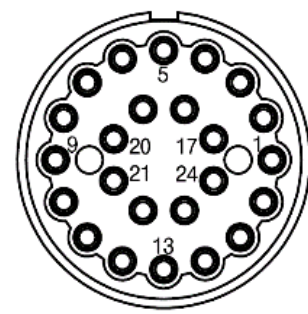
4 Channel



8 Channel



12 Channel



24 Channel

## ORDERING INFORMATION

### FOBEX - A - B - C - D - E - F - G - H

e.g. FOBEX - J - P - A - 4 - 0 - 09 - B

- A: CONNECTOR SIZE
- B: CONNETOR TYPE
- C: SHELL MATERIAL
- D: NUBMER OF FIBER
- E: NUMBER OF ELECTRICAL
- F: FIBER TYPE
- G: WAVELENGTH
- H: CABLE DIAMETER

#### A: CONNECTOR SIZE

- M – MINI
- J – JUNIOR
- S – SENIOR
- MX – MAXI

#### B: CONNECTOR TYPE

- P – PLUG
- BD – BULKHEAD D-HOLE
- BS – BULKHEAD SQUARE FLANGE
- P90 – PLUG 90° ANGLED
- BD90 – BULKHEAD D-HOLE 90° ANGLED
- BS90 – BULKHEAD SQUARE FLANGE 90° ANGLED

#### C: SHELL MATERIAL

- A – ALUMINUM
- S – STAINLESS STEEL

#### D: NUMBER OF FIBER

- 1 – 1 OPTICAL CHANNEL
- 2 – 2 OPTICAL CHANNEL
- 4 – 4 OPTICAL CHANNEL
- 8 – 8 OPTICAL CHANNEL
- 12 – 12 OPTICAL CHANNEL
- 16 – 16 OPTICAL CHANNEL
- 24 – 24 OPTICAL CHANNEL

#### E:NUMBER OF ELECTRICAL

- 0 – NO ELECTRICAL CONTACTS
- 1 – 1 ELECTRICAL CONTACTS
- 2 – 2 ELECTRICAL CONTACTS
- 4 – 4 ELECTRICAL CONTACTS

#### F: FIBER TYPE

- 09 – SINGLE MODE(9/125)
- 52 – MULTI MODE(50/125) – OM2
- 53 – MULTI MODE(50/125) – OM3
- 54 – MULTI MODE(50/125) – OM4
- 62 – MULTI MODE(62.5/125) – OM1

#### G: WAVELENGTH

- A – 850/1300nm
- B – 1310/1550nm
- C – 1310nm ONLY
- D – 1550nm ONLY

#### H: CABLE DIAMETER

- Ø4.6: 4.6MM
- Ø5.5: 5.5MM
- Ø9.2: 9.2MM