

# Water-Proof Optical Connector with MT Ferrule

MF11BMT Series

IP67

12, 24 pos.

Bayonet lock



## ■ Features

### 1. Water-proof multi-pos. connector

MT Ferrule into waterproof metal shell.

### 2. Bayonet lock

Easy and secure installation and removal with Bayonet lock design.

### 3. Harsh environments

IP67 water-proof compliant.

### 4. MPO cleaner can be used

Plug and receptacle can be cleaned with MPO cleaner.

### 5. 5000 mating times

Robust metal shell enables 5000 insertion/extraction.

## ■ Usage

Broadcasting camera etc.

## ■ Product Specifications

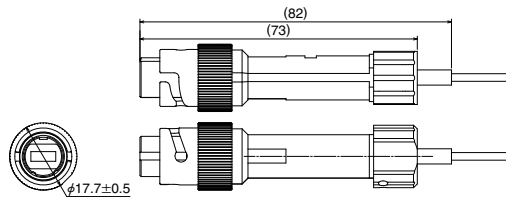
Ratings	Operating temperature range	-20°C to +60°C	Storage temperature range	-40°C to +60°C (packaged)
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Item	Testing method	Specifications
Optical performance		
Insertion loss	Wavelength : 850 ± 30nm (LED)	0.75dB or less (GI)
Mechanical characteristic		
Insertion/extraction cycles	5,000 times	Insertion loss after test : 0.75dB or less (per each connection), No damage, crack or loosened.
Vibration resistance	Frequency range : 10 to 55Hz, half amplitude : 0.75mm, acceleration : 98.1m/s <sup>2</sup> , bidirection 2 hours each	
Shock resistance	Acceleration : 98.1m/s <sup>2</sup> , duration : 6ms, half-sin wave in 2 axes, 3 cycles each	
Environmental performance		
Temperature/humidity cycles	-10°C to +65°C, humidity : 90% to 96%, 168 hours (12 hours/cycle × 14 cycles)	Insertion loss after test : 0.75dB or less (per each connection), No damage, crack or loosened.
Temperature cycles	-40°C to +75°C, 336 hours (8 hours/cycle × 42 cycles)	
Heat resistance	+85°C, 240 hours	
Cold-resistance	-40°C, 240 hours	
Humidity resistance	75°C, 95% for 168 hours	
Salt spray	Concentration : 5%, 48 hours	No corrosion which is effect on the performance.
Waterproof	Place the product under 1M of water for 30 min (IP67)	No water leaks into the connector.

## ■ Materials / Finish

Part name	Materials	Finish
Plug shell and receptacle	Zinc diecast	Nickel plated
Crimp washer Crimp ring	Brass	Nickel plated
O-ring, rubber ring, gasket	Silicon rubber	————
Screw ring	PPS	————
Spring	Piano wire	Zinc plated
Guide pin	Stainless steel	————

### ■ Plug



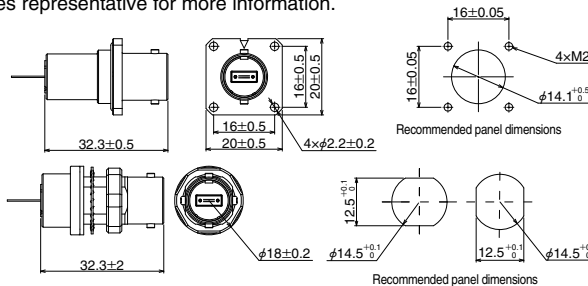
Part No.	HRS No.	Specification
MF11BMT-WP4CB02 (Note 1, 2)	709-7052-0 00	$\phi 4$ mm cable for 24 pos.
MF11BMT-WP4CA02 (Note 1, 2)	709-7045-0 00	$\phi 4$ mm cable for 12 pos.

Note 1 : Harnessing of the MF11BMT does not take place at HRS. For details please contact a HRS Sales representative.

Note 2 : For further environmental durability, other plating is available. Please contact a HRS Sales representative for more information.

### ■ Receptacle

#### ● M2 screw



Part No.	HRS No.	Specification
MF11BMT-WRFB01 (Note 1, 2)	709-7001-0 00	Square flange for 24 pos.
MF11BMT-WRBB01 (Note 1, 2)	709-7010-0 00	Bulk head for 24 pos.
MF11BMT-WRFA01 (Note 1, 2)	709-7012-0 00	Square flange for 12 pos.
MF11BMT-WRBA01 (Note 1, 2)	709-7011-0 00	Bulk head for 12 pos.

Note 1 : Harnessing of the MF11BMT does not take place at HRS. For details please contact a HRS Sales representative.

Note 2 : For further environmental durability, other plating is available. Please contact a HRS Sales representative for more information.

#### ● Bulkhead screw type



### ■ Water Proof Cap

#### ● Water Proof Cap for Plug (Ni plated)



Part No.	HRS No.
MF11BMT-WPC2	709-7035-0 00

#### ● Water Proof Cap for Receptacle (Ni plated)



Part No.	HRS No.
MF11BMT-WRC2	709-7036-0 00

### ◆ Tooling

#### ● Retention plate installation tooling

For installing retention plate for the plug or receptacle.



Part No.	HRS No.
MF11BMT-W01/CV-MD	902-6075-0 00

#### ● Easy Assembly tool for pushing stopper into shell



Part No.	HRS No.
MF11BMT-W01/CV-MD2	902-6078-0 00

#### ● Crimp tool

For crimping the plug retention ring.



Part No.	HRS No.
MF11BMT-WP01/CR-MP	902-6076-0 00

#### ● Hand crimp tool



Part No.	HRS No.
HT303/MF11BMT(8.1/10.3)	902-6079-0 00



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