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

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 \pm 30nm (LED)	0.75dB or less (GI)	
Mechanical characteristic			
Insertion/extraction cycles	5,000 times		
Vibration resistance	Frequency range: 10 to 55Hz, half amplitude: 0.75mm, acceleration: 98.1m/s², bidirection 2 hours each	Insertion loss after test: 0.75dB or less (per each connection),	
Shock resistance	Acceleration: 98.1m/s², duration: 6ms, half-sin wave in 2 axes, 3 cycles each	No damage, crack or loosened.	
Environmental performance			
Temperature/ humidity cycles	-10°C to $+65$ °C, humidity : 90% to 96%, 168 hours (12 hours/cycle \times 14 cycles)		
Temperature cycles	-40°C to +75°C, 336 hours (8 hours/cycle × 42 cycles)	Insertion loss after test : 0.75dB or less (per each connection),	
Heat resistance	+85°C, 240 hours	No damage, crack or loosened.	
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 perfomance.	
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



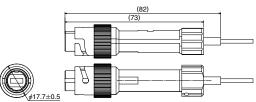
■Receptacle

●M2 screw





Bulkhead screw type



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

les representative to	or more information.	16±0.05
32.3±0.5	16:0.5.1 20:0.5.1 4x\$2.2:0.2	4xM2 4xM2 414.1 ^{10.5} Recommended panel dimensions
32 3+2	\$18±0.2 \$14.5 ⁴³	1 1 1 12.5 ^{+0.1} ¢14.5 ^{+0.1}

32.3±2

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.

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■Water Proof Cap

■Water Proof Cap for Plug (Ni plated)



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

Crimp tool

For crimping the plug retention ring.



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

Water Proof Cap for Receptacle (Ni plated)

Recommended panel dimensions



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

Easy Assembly tool for pushing stopper into shell



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

Hand crimp tool



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



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