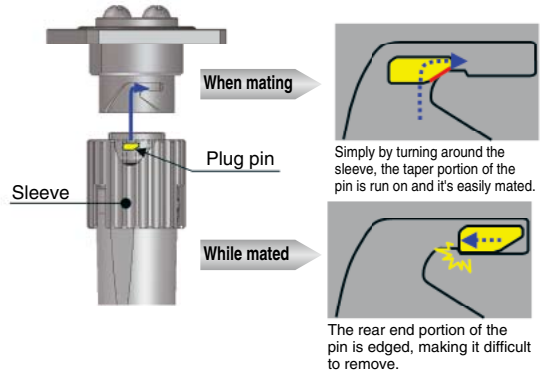
Subminiature, Waterproof Duplex Fiber Optic Connectors

MF10B Series

Waterproof **2pos.** **Bayonet lock**



Highly reliable bayonet lock.



■Features

1. Micro miniature structure

This micro miniature twin-core waterproof connector consists of a ϕ1.25mmMU ferrule encased in an internal housing and shell.

2. Integrated structure with excellent vibration and shock resistance

The bayonet lock assures connectors are easily and firmly mated. In addition, mating design resists disengagement, resulting in excellent resistance to vibration and shock, conforming to JIS E 4031 type 5 (vibration) and JIS E 4032 type 2 (shock) for railcar parts.

3. Excellent compatibility with high-intensity, high flexible cables.

For the plug side, a high-intensity optical fiber cable is available for military spec (external cable diameter ϕ5 or ϕ6.5 mm is the standard specification.)

This cable is light, flexible and suitable for longdistance link-ups in outdoor events.

Because of light weight and flexibility, the cable is suitable for long distance extension cable for live broadcast at outdoor events.

＊For other cables, please consult factory.

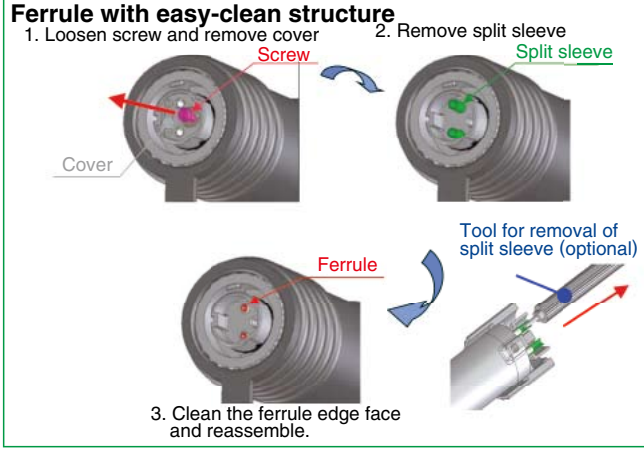
4. Structure with a cleanable ferrule end face

When cleaning the plug ferrule, remove the sleeve from the front to expose the ferrule edge face and thus facilitate cleaning.

5. Varied panel mounting options

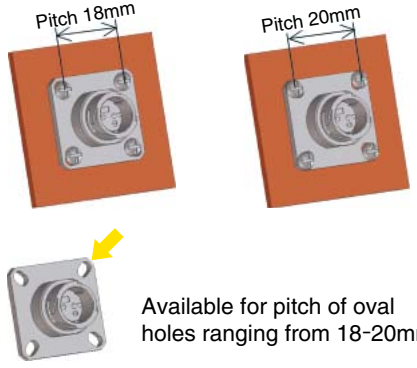
Square flange mounting with 4 screws in 4 positions and internal attachment via hexagon nuts are possible. The square flange type with 4 screws can be used for pitches between between 18 and 20mm.

Ferrule with easy-clean structure



Varied panel attachment method

4-point screw fix type



Hexagon nut fix type



Insertable from the panel rear, which makes it easy to waterproof

■Specifications

Ratings	Operating Temperature Range	-40°C to +85°C	Storage Temperature Range	-25°C to +75°C (at packing)

Item			Test Method	Requirements
Optical characteristics	Insertion loss	SM	Wavelength 1310±30nm(LD)	1.0 dB MAX. (Typical 0.2 dB)
		MM(GI)	Wavelength 1310±30nm(LED)	0.5 dB MAX. (Typical 0.1 dB) (Note)
	Return loss	SM	Wavelength 1310±30nm(LD)	40 dB min.
		MM(GI)		22 dB min.
Mechanical characteristics	Durability (mating/un-mating)		5,000 times	1) Insertion loss fluctuation after test:0.3dB max. 2) No visible damage or components dislocation.
	Tensile strength(axial)		A tensile force to cable axially for at 200N(Cable Dia: ϕ6.5mm), 100N(Cable Dia: ϕ5mm), 400N(Cable with tension member)	Insertion loss range:≦0.3dB No Looseness, breakage, cracks
	Flex Resistant		10,000 times at 90 degree, right and left direction.	
	Vibration		2 hours of the right and left, 4 hours of the vertical direction at an amplitude of 2.3mm and an acceleration 14.8G.	
	Shock		4 times and 2 directions with the acceleration 88m/s^2 and length of effectiveness 0.025s.	
Environmental characteristics	Humidity (Temperature/ humidity-cycles)		-10℃ to +65℃, humidity: 90% to 96%, 240hours. (24H/cycle×10cycle)	1) Insertion loss fluctuation after test:0.3dB max. 2) No visible damage or components dislocation.
	Temperature cycle		-40℃ to +75℃, 42 cycles	
	Dry heat		240 hours at +85℃	
	Cold		240 hours at −40℃	
	Salt mist		Salt mist :5% and temperature 35℃ for 1000hours. With the connector hood installed.	No corrosion.
	Water resistance(mating)		Put the product under water for 1min.With air pressure 4.9kPa.	No air leakage.

Note: Measured with a 1.5 dB Mode scrambler.

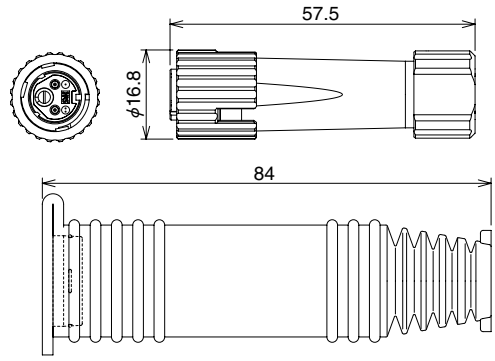
■Material and Finish

Part	Material	Finish	Remarks
Housing	Zinc die-casting	Nickel plated / Chrome plated (Black)	———
Stopper	Synthetic resin	———	UL94V-0
Rubber hood	Synthetic rubber	———	———
Spring	Piano wire	Zinc plated	———
Split sleeve	Zirconia	———	———

■Plug

●Cable without tension member (Cable dia: 5mm, 6.5mm)





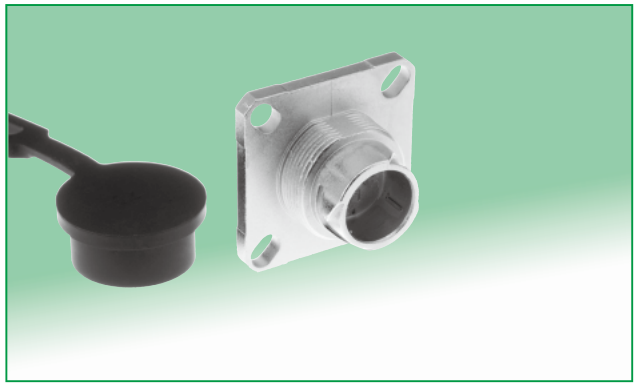
Part Number	CL No.	Plating
MF10B-WP5C01-0200	709-1020-8-00	Nickel
MF10B-WP5CH01-0200	709-1015-8-00	Chrome(black)
MF10B-WP6.5C01-0200	709-1004-1-00	Nickel
MF10B-WP6.5CH01-0200	709-1007-0-00	Chrome(black)

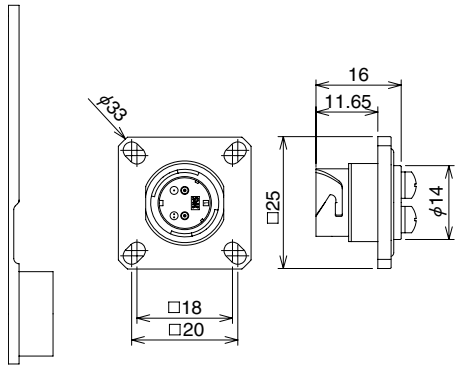
●Cable with tension member (Cable dia: 7 mm)

Part Number	CL No.	Plating
MF10B-WPS7C01-0200	709-1018-6-00	Nickel
MF10B-WPS7CH01-0200	709-1024-9-00	Chrome(black)

■Receptacle

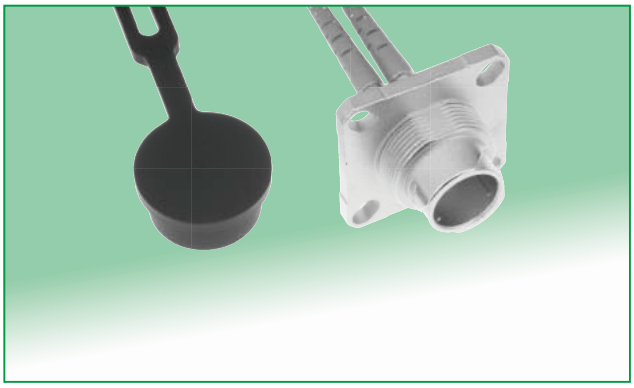
●φ0.9 fiber, M3 screw attachment type

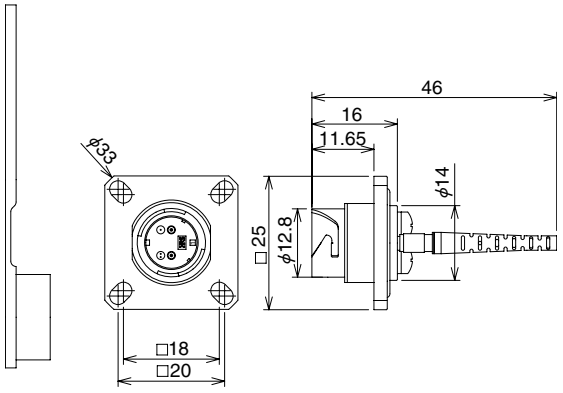




Part Number	CL No.	Plating
MF10B-WRF01-0200	709-1005-4-00	Nickel
MF10B-WRFH01-0200	709-1008-2-00	Chrome(black)

●φ2 code, M3 screw attachment type

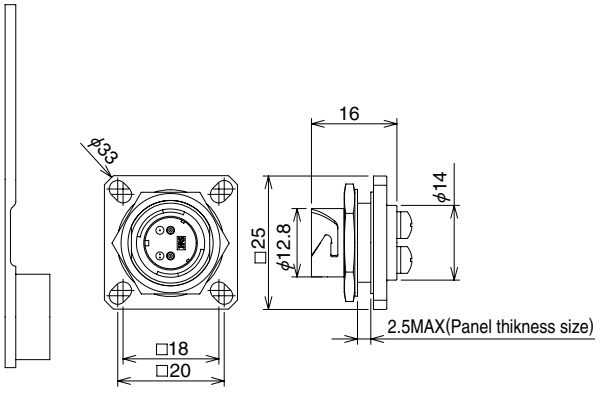




Part Number	CL No.	Plating
MF10B-WRFC01-0200	709-1014-5-00	Nickel
MF10B-WRFCH01-0200	709-1032-7-00	Chrome(black)

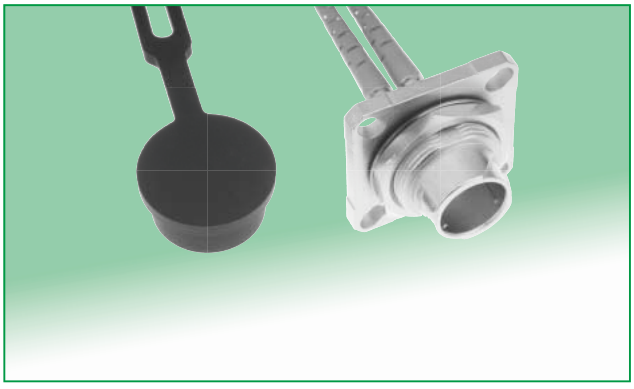
●φ0.9 fiber, hexagon nut attachment type

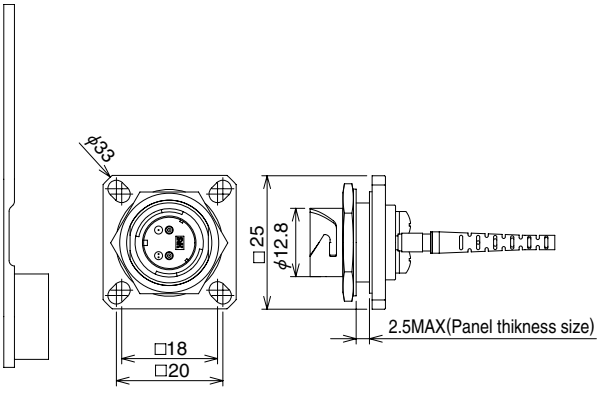




Part Number	CL No.	Plating
MF10B-WRB01-0200	709-1010-4-00	Nickel
MF10B-WRBH01-0200	709-1025-1-00	Chrome(black)

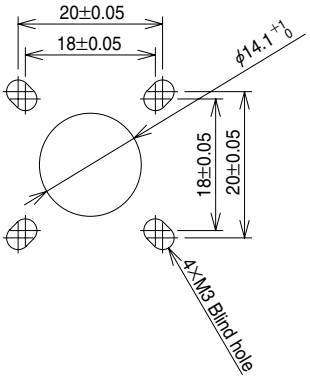
●φ2 code, hexagon nut attachment type



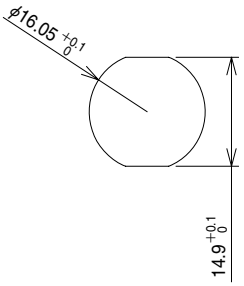


Part Number	CL No.	Plating
MF10B-WRBC01-0200	709-1013-2-00	Nickel
MF10B-WRBCH01-0200	709-1033-0-00	Chrome(black)

■Recommended panel cutouts



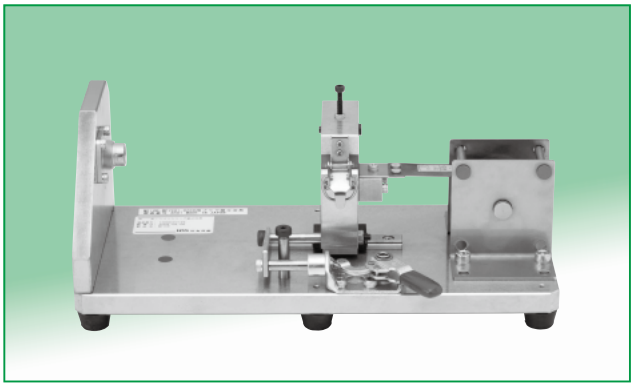
M3 screw attachment type



Hexagon nut attachment type

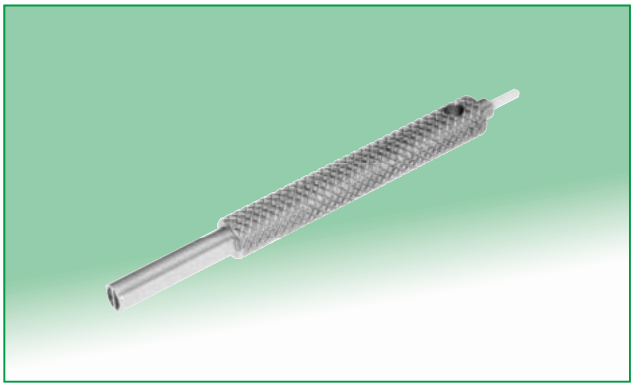
■Tools

●Plug assembly tool



Part Number	CL No.
MF10B-WP7C01-0200/CVMD	902-6063-0-00

●Split sleeve removal tool



Part Number	CL No.
MF10B-T1	709-1034-2-00

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