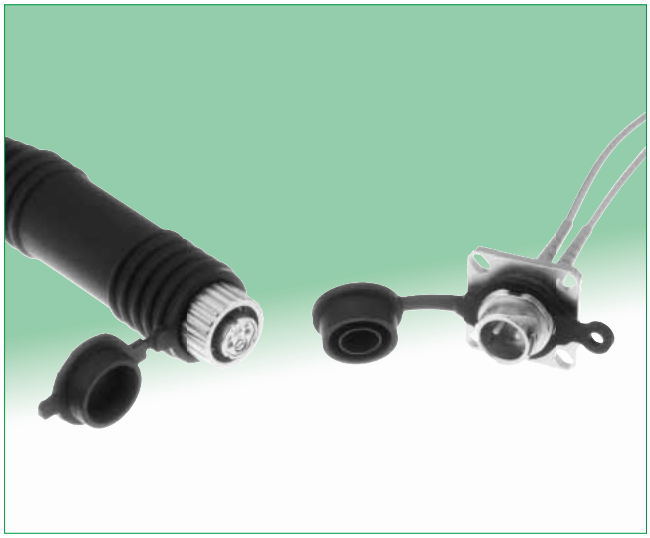
Subminiature, Waterproof Duplex Fiber Optic Connectors

MF10B Series

Waterproof **2 Positions** **Bayonet Locking System**



Reliable bayonet lock

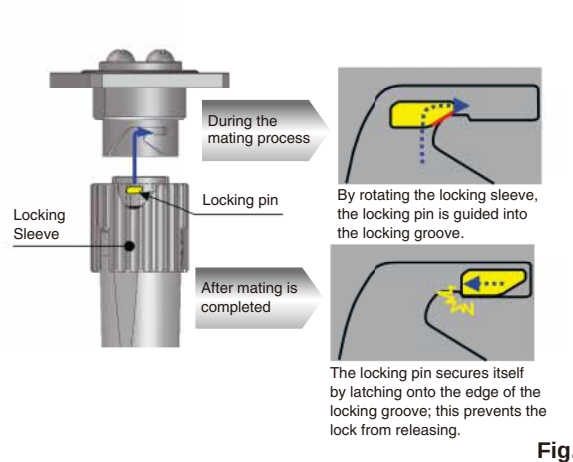


Fig.1

■Features

1. Extremely small structure

This miniature twin-core waterproof connector utilizes a ϕ1.25mm MU ferrule integrated in an internal housing and shell.

2. Integrated structure with excellent vibration and shock resistance

The bayonet lock assures that connectors can be mated easily and securely. In addition, the locking system prevents accidental 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. Compatible with hi-flex cables

For the plug side, a hi-flex optical fiber cable is available for Military Specification applications (external cable diameter ϕ5 or ϕ6.5 mm is the standard specification). This light and flexible cable is also suitable for in-line connection of long-distant transmission in outdoor events.
*Before using other types of cables, please contact your local Hirose sales representative.

4. Easy ferrule access

To access the plug ferrule for cleaning, remove the sleeve from the front of the connector to expose the front of the ferrule end face.

5. Multiple mounting options

A four-screw, square flange mount and hexagonal jam nut mount options are available. The four-screw flange type can accept any screw pitch from 18 to 20mm.

Easy access to the ferrule for cleaning

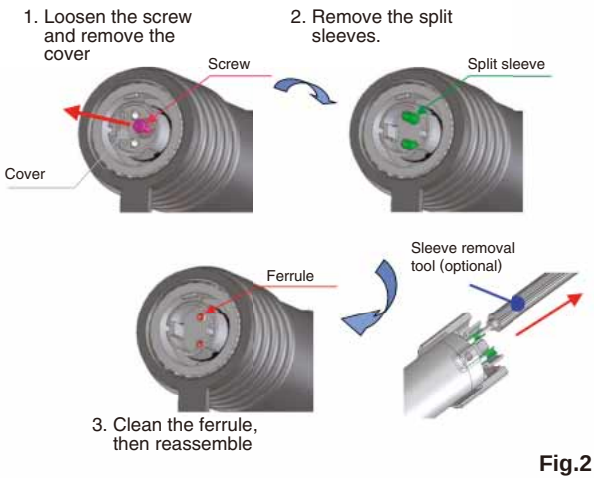


Fig.2

Panel mounting options

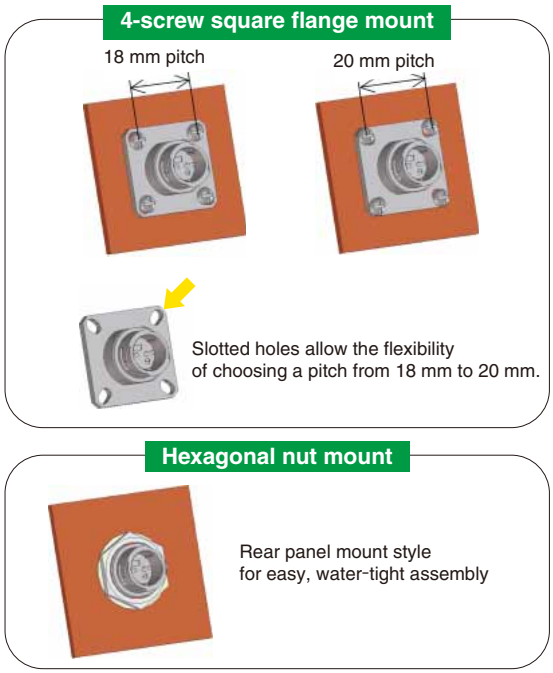


Fig.3

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■Product Specifications

Rating	Operating temperature range	-40°C to +85°C	Storage temperature range	-25℃ to +75℃ (AT PACKING)

Item		Testing method	Specifications
Optical characteristic	Insertion loss	Wavelength : 1310±20nm (LD)	SM : 1.0 dB max. (Typical : 0.2dB) GI : 0.5 dB max. (Typical 0.1dB max.)
Mechanical characteristics	Durability	5,000 mating cycles	Insertion loss fluctuation after test : 0.3 dB max. No visible damage or components dislocation.
	Tensile strength (axial)	Axial tensile force: 100 N (ϕ5mm cable), 200 N (ϕ6.5mm cable), or 400 N (cable with tension member)	
	Flex resistant	Load of 500g, 10,000 times at 90 degrees, right and left direction	
	Vibration	Amplitude of 2.3mm, acceleration 14.8G, vertical direction for 4 hours and right and left for 2 hours Based on JIS E 4031 Type 5	
	Shock	Impact of 6 G, duration of 0.025 s ±25%, 4 times Based on JIS E 4032 Type 2	
Environmental characteristics	Humidity (Temperature/ humidity-cycle)	Temperature : -10°C to +65°C Humidity : 90% to 96%, 10 cycles (240 hours)	Insertion loss fluctuation after test : 0.3 dB max. No loose, broken or cracked parts
	Temperature cycle	-40°C to +75°C, 42 cycles	
	Heat resistance	240 hours at +85°C	
	Cold resistance	240 hours at -40°C	
	Salt mist	5% for 1,000 hours (with the connector hood installed)	No heavy corrosion ruin the function
	Water proof	1 minute at internal air pressure of 4.9 kPa	No air leakage

■Materials / Finish

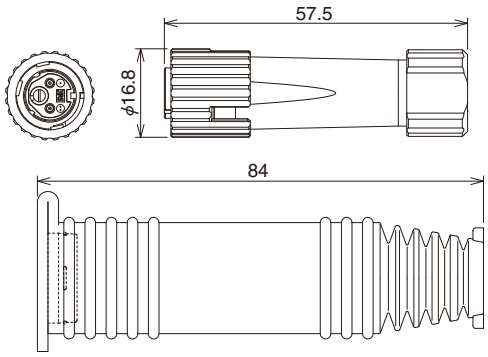
Component	Material	Finish	Remarks
Housing	Zinc die-casting	Nickel plated / Chrome plated (Black)	————
Stopper	Synthetic resin	————	UL94V-0
Rubber hood	Synthetic rubber	————	————
Spring	Piano wire	Zinc plated	————
Split sleeve	Zirconia	————	————

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■Plug

●Cable without strain relief (Cable diameter: 5 mm, 6.5 mm)





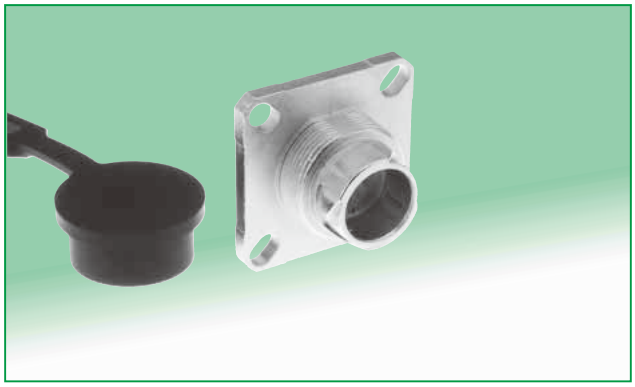
Part No.	HRS No.	Plating
MF10B-WP5C01-0200(31)	709-1020-8 31	Nickel
MF10B-WP5CH01-0200(31)	709-1015-8 31	Chrome (black)
MF10B-WP6.5C01-0200(31)	709-1004-1 31	Nickel
MF10B-WP6.5CH01-0200(31)	709-1007-0 31	Chrome (black)

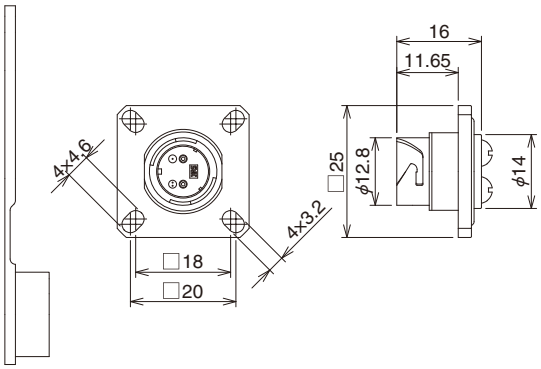
●Cable with strain relief (Cable diameter : 7mm)

Part No.	HRS No.	Plating
MF10B-WPS7CH01-0200(31)	709-1024-9 31	Chrome (black)

■Receptacle

●φ0.9 fiber, M3 screw type

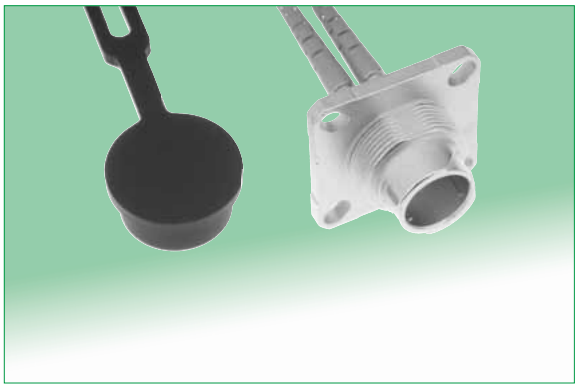


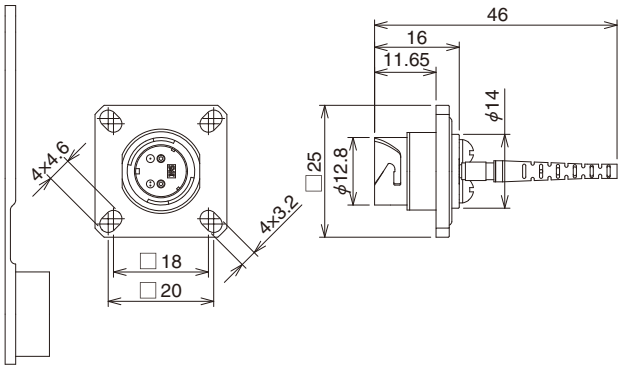


Part No.	HRS No.	Plating
MF10B-WRF01-0200(31)	709-1005-4 31	Nickel
MF10B-WRFH01-0200(31)	709-1008-2 31	Chrome (black)

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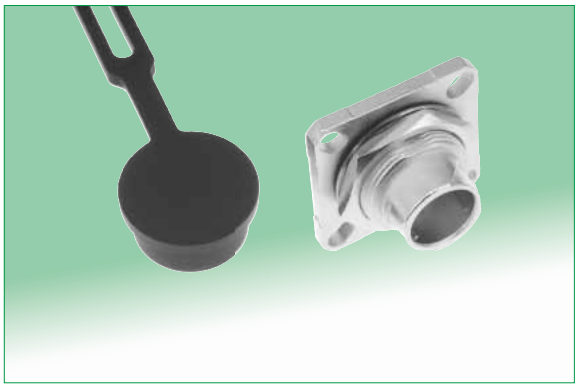
●ϕ2mm cable, M3 screw type

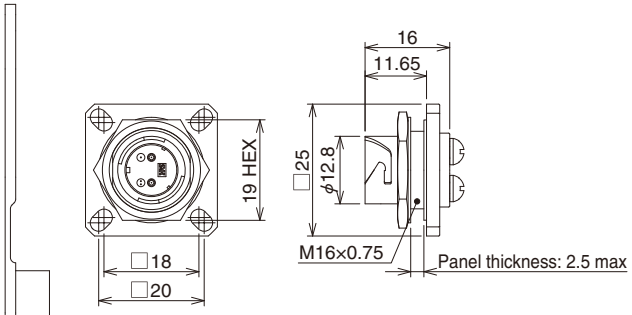




Part No.	HRS No.	Plating
MF10B-WRFC01-0200(31)	709-1014-5 31	Nickel
MF10B-WRFCH01-0200(31)	709-1032-7 31	Chrome (black)

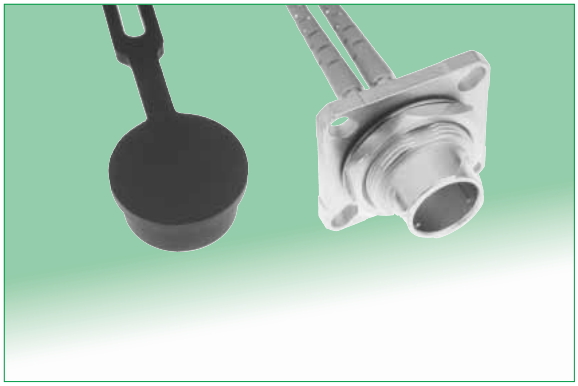
●ϕ0.9mm fiber, hexagon nut type

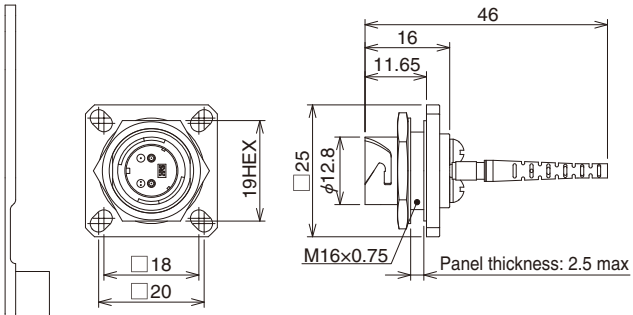




Part No.	HRS No.	Plating
MF10B-WRB01-0200(31)	709-1010-4 31	Nickel
MF10B-WRBH01-0200(31)	709-1025-1 31	Chrome (black)

●ϕ2mm cable, hexagon nut type

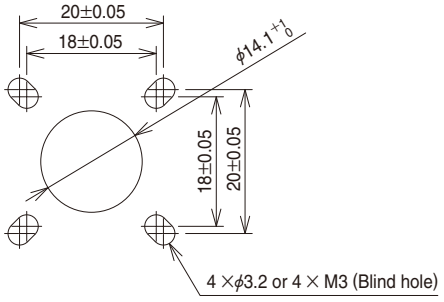




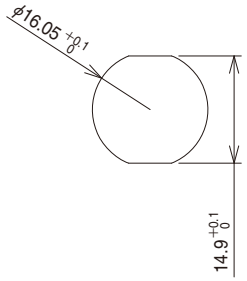
Part No.	HRS No.	Plating
MF10B-WRBC01-0200(31)	709-1013-2 31	Nickel
MF10B-WRBCH01-0200(31)	709-1033-0 31	Chrome (black)

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◆Panel Mounting Dimensions



M3 screw type

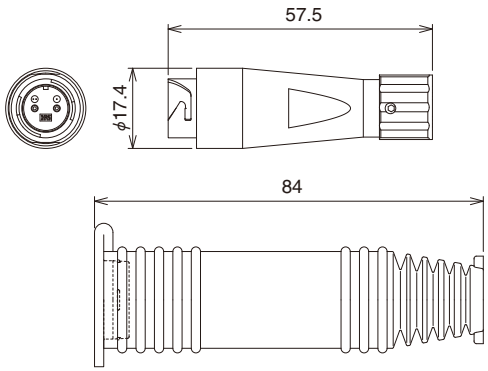


For hexagon nut type

■In-Line Jack

●Cable without strain relief (Cable diameter: 6.5 mm)

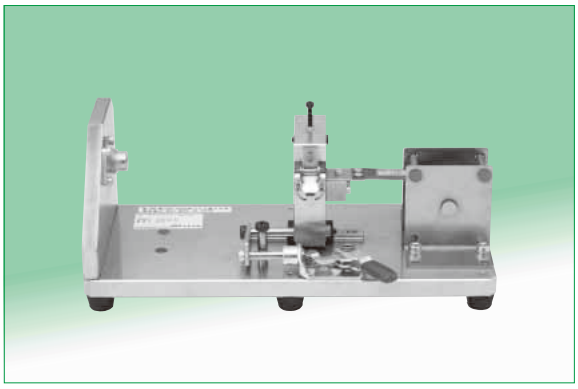




Part No.	HRS No.	Plating
MF10B-WJ6.5C01-0200(31)	709-1011-7 31	Nickel
MF10B-WJ6.5CH01-0200(31)	709-1035-5 31	Chrome (black)

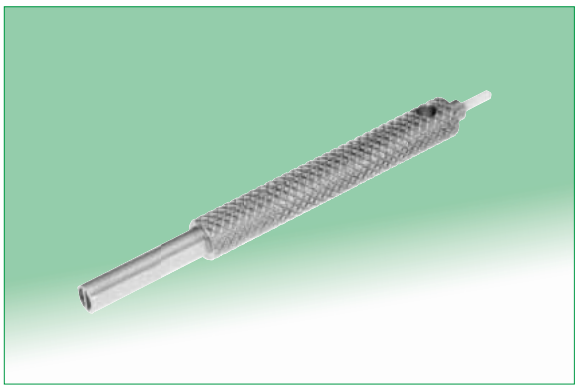
◆Tools

●Plug assembly tool



Part No.	HRS No.
MF10B-WP7C01-0200/CVMD	902-6063-0

●Split sleeve removal tool



Part No.	HRS No.
MF10B-T1	709-1034-2

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The characteristics and the specifications contained herein are for reference purpose. Please refer to the latest customer drawings prior to use.
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