

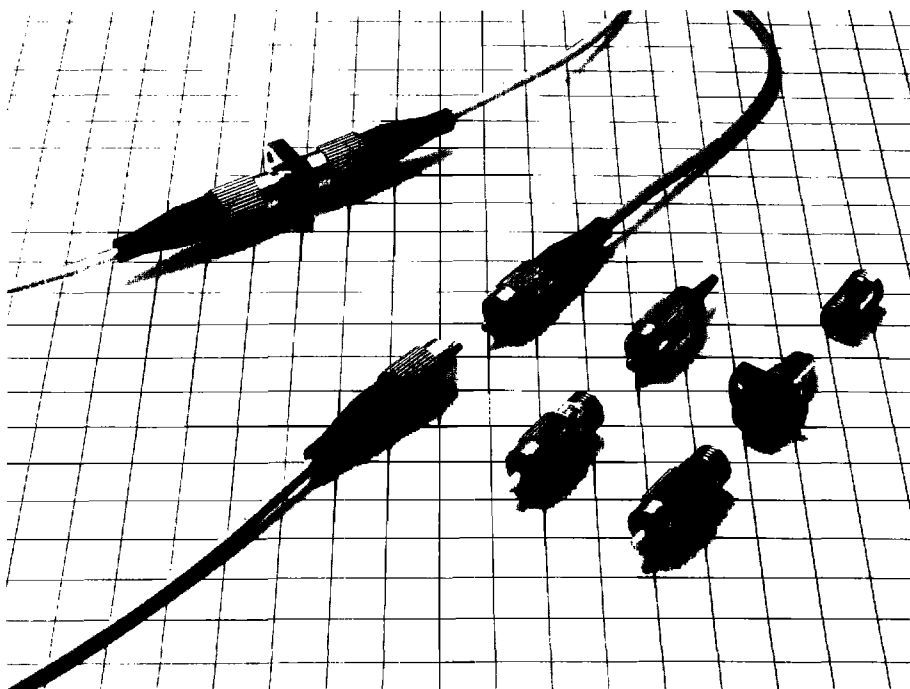
FC TYPE OPTICAL FIBRE CONNECTOR

SCOPE:

The HRFC series optical fibre connector complies with JIS C 5970 (F01 type optical fibre connectors for cables). The construction and performance of the HRFC connector is such that it can be used in a performance of the HRFC connector is such that it can be used in a wide variety of applications, including high quality optical transmission trunk lines, which require low reflection and ultra-low loss, optical measuring instruments, LANs, and equipment and short-link systems that do not need such a low reflection or loss.

The HRFC connectors are suitable for single mode and multi-mode optical fibres, are provided with $M8 \times 0.75$ fixing screws and a high-precision aligning ferrule, and are designed to be butt-joint coupled by a high-precision cylindrical split sleeve.

The HRFC connectors with cables are available in the following types: flat-polishing, PC polishing that features low reflection and ultra-low loss, and advanced PC polishing that features low reflection.



FEATURES:

- (1) High performance and reliability.
- (2) Highly durable, secure coupling.
- (3) Compact and lightweight design.

APPLICATION:

Public communication network, LAN, CATV, Measuring equipment, etc.

OF OPTICAL FIBER CONNECTOR

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SPECIFICATIONS:

- (1) Insertion Loss
 - SSMA-9.5/125
 - PC, AdPC Polishing: 0.5dB or less. (Light source 1.3 μ m LD)
 - Flat Polishing: 1.0dB or less. (Light source 1.3 μ m LD)
 - SGL-50/125
 - PC Polishing: 0.3dB or less. (Light source 1.3 μ m LED)
 - Flat Polishing: 0.7dB or less. (Light source 1.3 μ m LED)
- (2) Reflection Loss
 - SSMA-9.5/125
 - PC Polishing: 22dB or more. (Light source 1.3 μ m LD)
 - AdPC Polishing: 40dB or more. (Light source 1.3 μ m LD)
 - SGL-50/125
 - PC Polishing: 22dB or more. (Light source 1.3 μ m LD)
- (3) Applicable Fibre Cord
 - SM-9.5/125, SGL-50/125 optical fibre cord
 - Insulation diameter φ 3mm, φ 2mm and φ 0.9mm (core)
- (4) Life
 - 500 times, Deviation of insertion loss Max. 0.2dB
- (5) Temperature Cycle
 - 25°C ~ 70°C, 100 cycles
 - Deviation of insertion loss: Max. 0.2dB
- (6) Vibration
 - 10~55Hz, Amplitude: 1.5mm
 - Deviation of insertion loss: Max. 0.2dB
- (7) Shock
 - 100G, Deviation of insertion loss: Max. 0.2dB

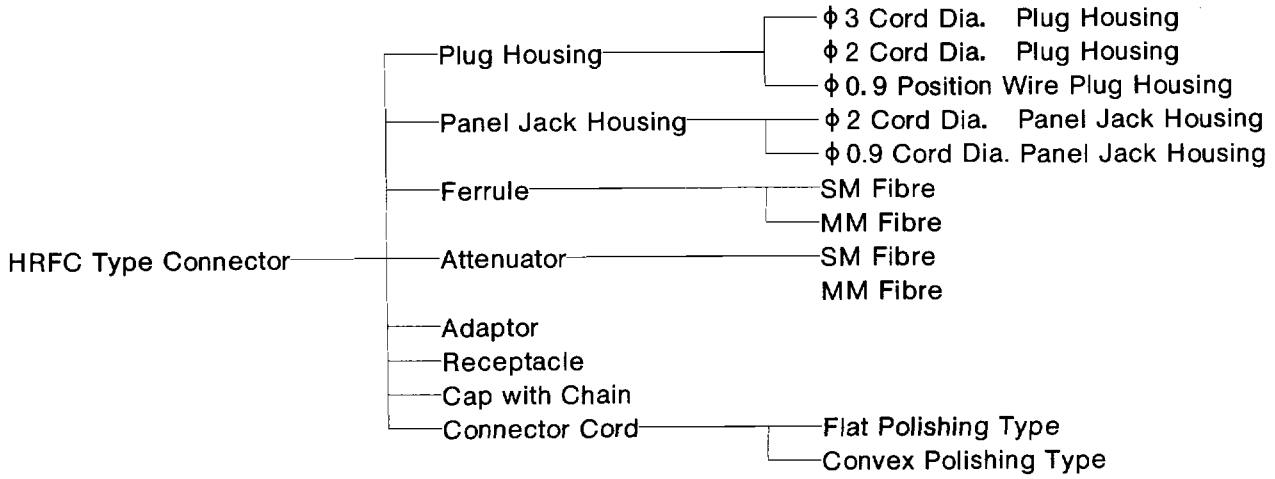
MATERIAL:

Part Name	Material	Treatment
Plug Housing	Copper Wire	Nickel Plating
Coil spring	Stainless Steel	
Ferrule	Stainless Steel + Alumina or Zirconia	
Adaptor	Copper Wire	Nickel Plating
Split Sleeve	Alloy of Copper	
Receptacle	Copper Wire	Nickel Plating
Attenuator	Stainless Steel	

OF OPTICAL FIBER CONNECTOR

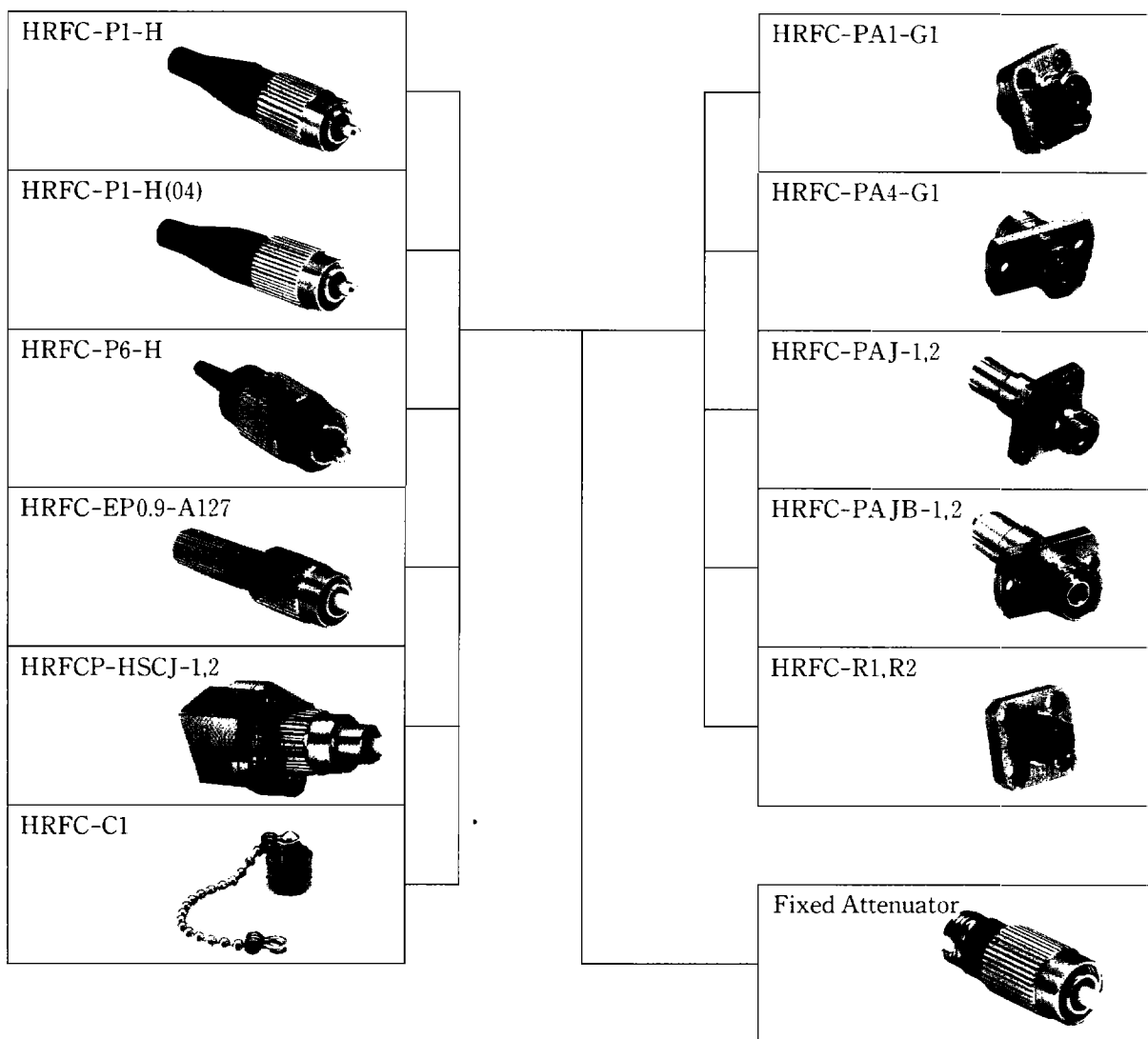
Handbook of Fiber Optics Technology

VARIETY:

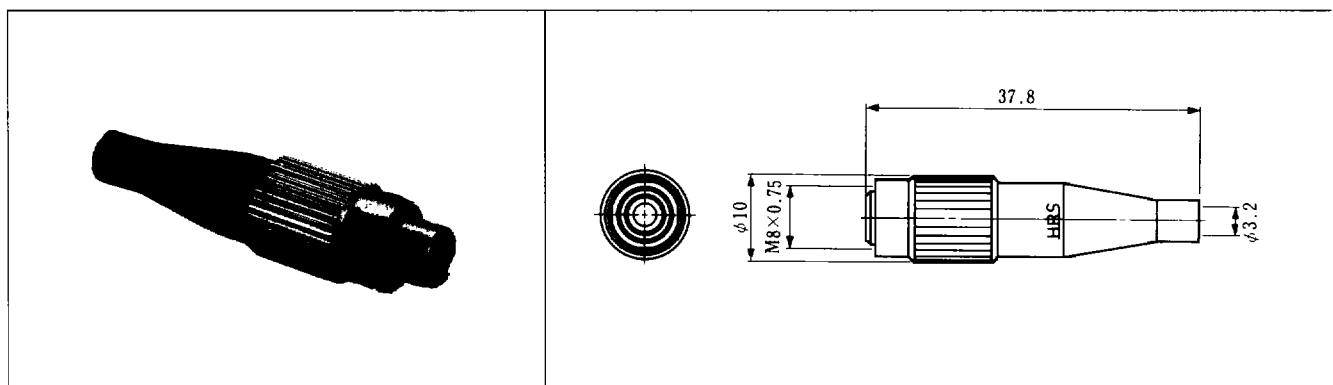


OF OPTICAL FIBER CONNECTOR

● FUNCTIONAL HRFC TYPE CONNECTOR

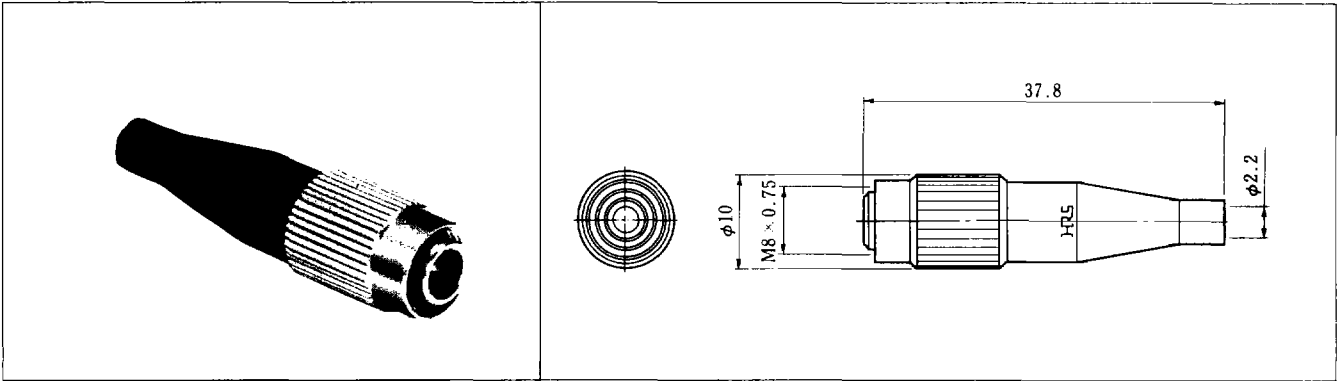


● PLUG HOUSING

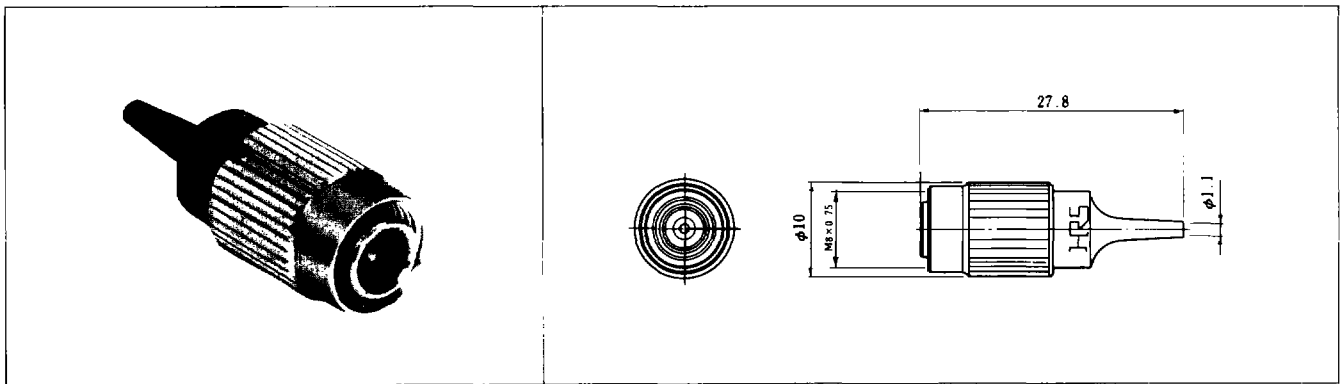


HRS No.	Part No.	Cord Dia. ϕ	Remark
CL701-0001-7	HRFC-P1-H	ϕ 3mm	—

OF OPTICAL FIBER CONNECTOR

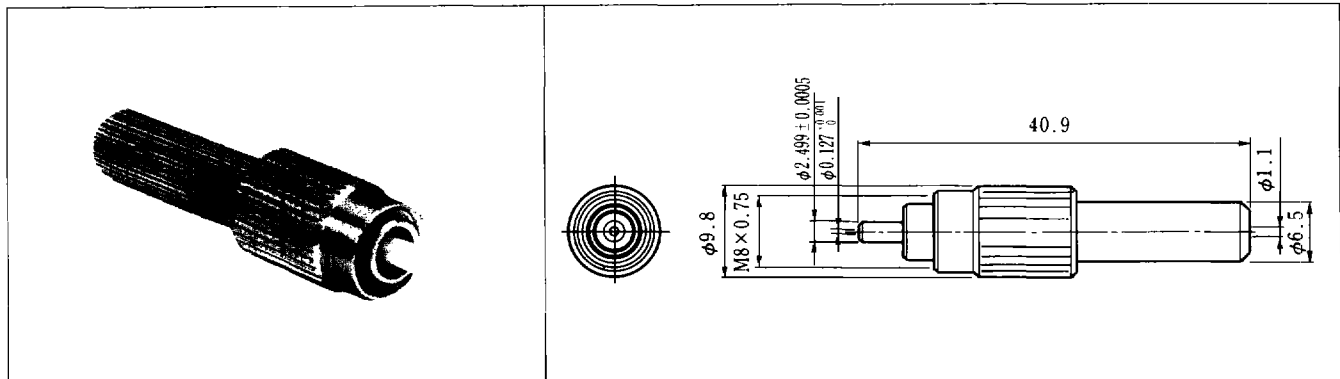


HRS No.	Part No.	Cord Dia. ϕ	Remark
CL701-0001-7-04	HRFC-P1-H(04)	ϕ 2mm	—



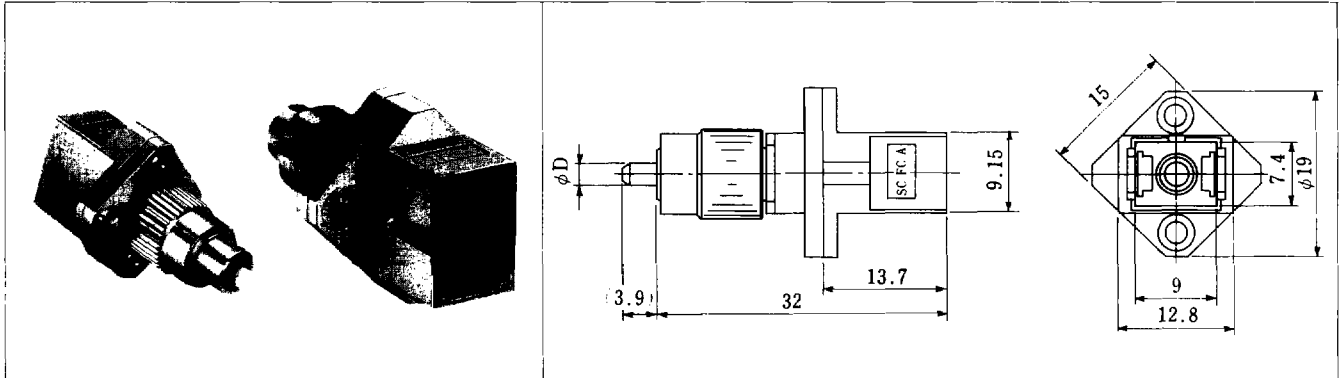
HRS No.	Part No.	Cord Dia. ϕ	Remark
CL701-0041-1	HRFC-P6-H	ϕ 0.9mm	—

Note: Above plug housing must be used with the ferrules.



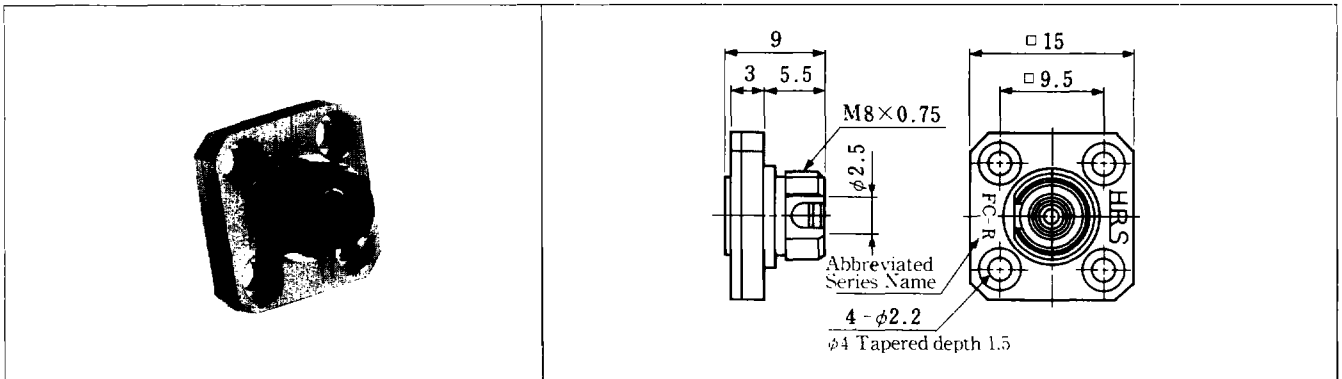
HRS No.	Part No.	Cord Dia. ϕ	Remark
—	HRFC-EP0.9-A127	ϕ 0.9mm	Emergency Connector

OF OPTICAL FIBER CONNECTOR



HRS No.	Part No.	Remark
CL701-0065-0	HRFCP-HSCJ-1	● ϕ D. dimension: HRFCP-HSCJ-1: $\phi 2.499 \pm 0.001$ HRFCP-HSCJ-2: $\phi 2.499 \pm 0.0005$
CL701-0085-7	HRFCP-HSCJ-2	● The guide key on the FC plug end does not necessarily fit the guide on the SC adapter end.

● RECEPTACLE



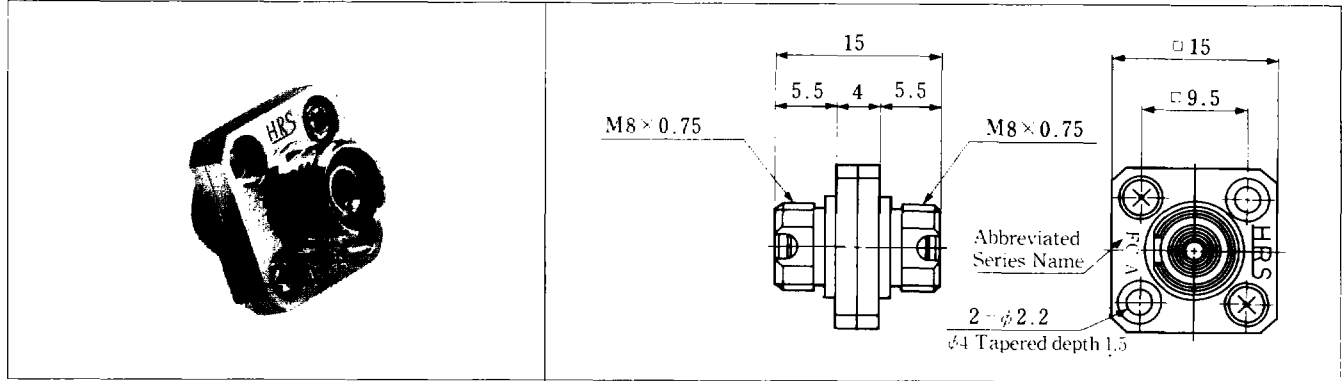
HRS No.	Part No.	$\phi 2.5$ Dia.	Remark
CL701-0016-4	HRFC-R1	+0.011 +0.001	—
CL701-0023-0	HRFC-R2	+0.003 0	—

● FERRULE

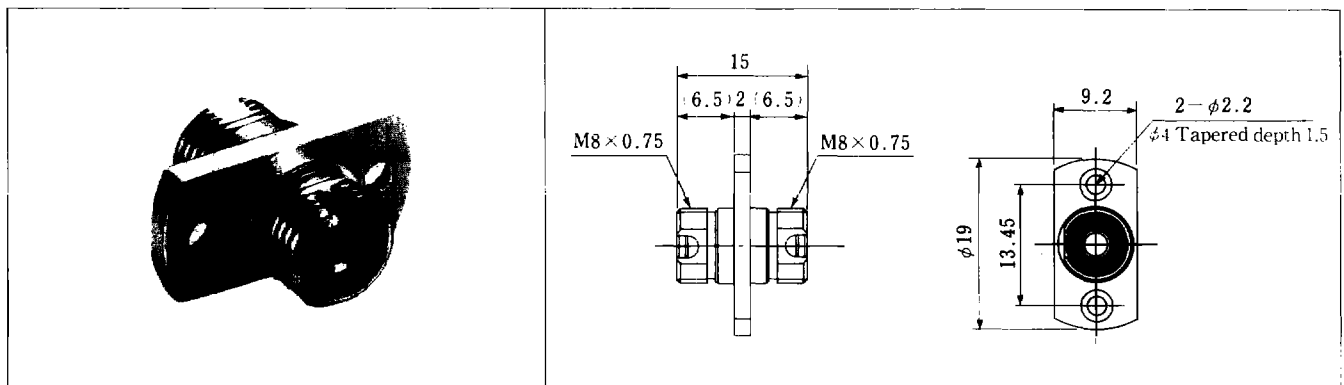
Use zirconia ferrules for SC optical fibre connectors. Stainless steel capillary ferrules are available.

OF OPTICAL FIBER CONNECTOR

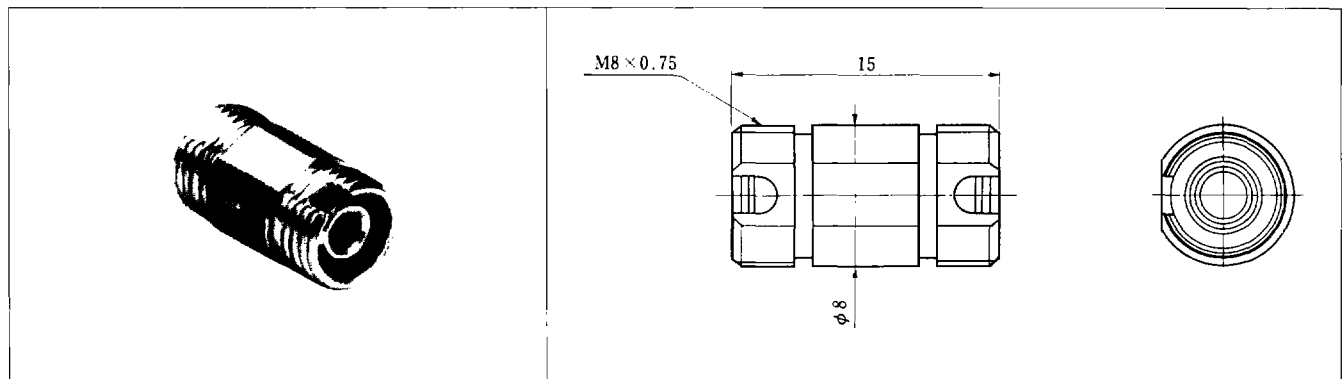
● ADAPTOR



HRS No.	Part No.	Remark
CL701-0014-9	HRFC-PA1-G1	—



HRS No.	Part No.	Remark
CL701-0068-8	HRFC-PA4-G1	—

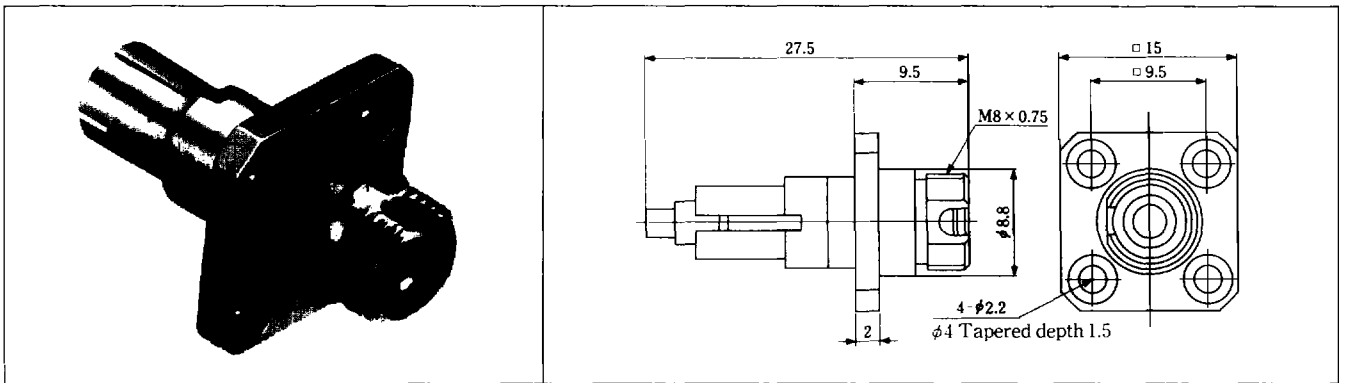
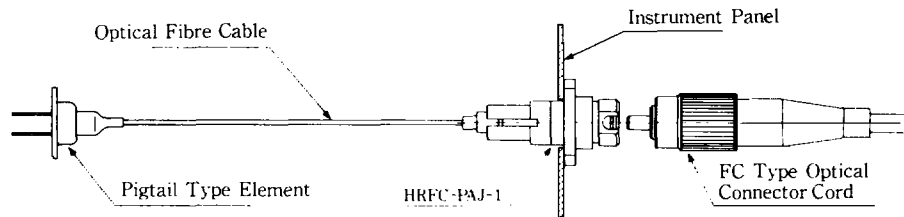


HRS No.	Part No.	Remark
CL701-0039-0	HRFC-A2-SF	—

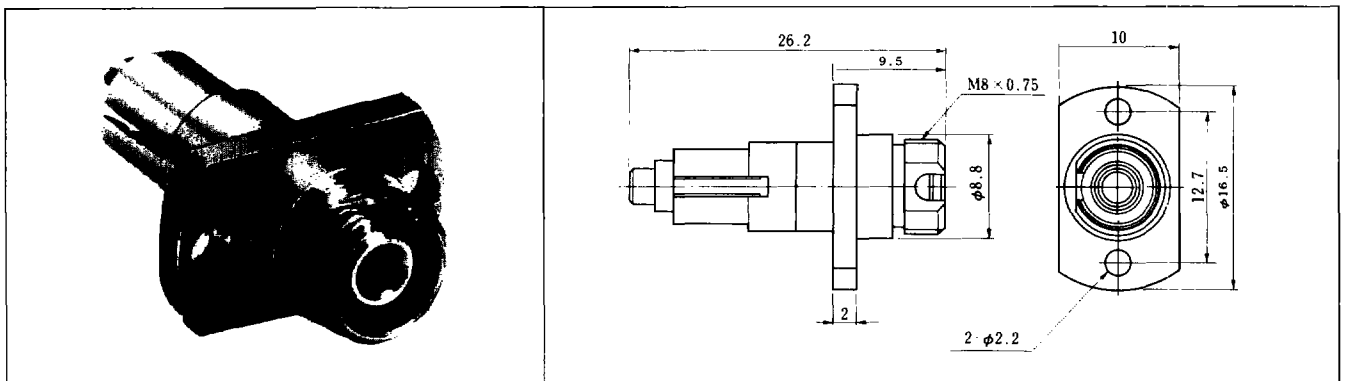
OF OPTICAL FIBER CONNECTOR

● PANEL JACK HOUSING

This connector is used to couple the element to a cable fitted with the FC optical connector as shown below. The mechanism of the ferrule alignment and butting is exactly the same as an ordinary plug-adapter-plug.



HRS No.	Part No.	Applicable Dia. ϕ	Remark
CL701-0024-2	HRFC-PAJ-1	ϕ 0.9mm	GI Fibre Only
CL701-0025-5	HRFC-PAJ-2		SM Fibre Only

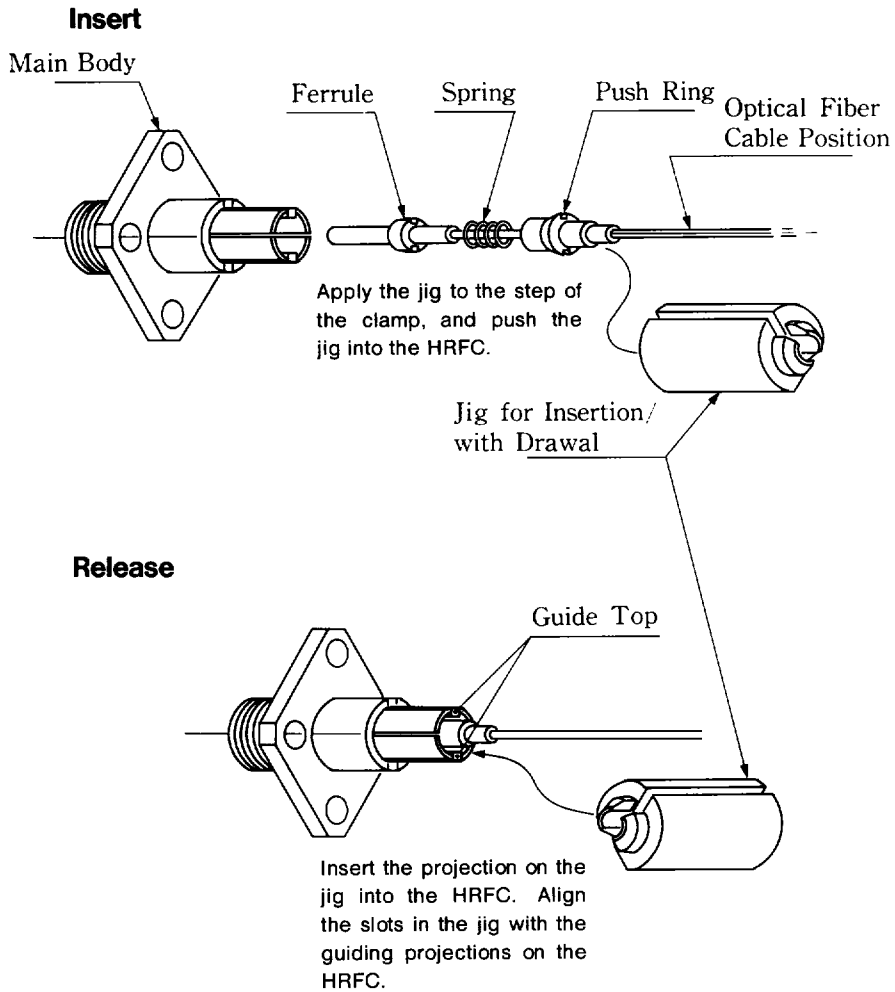


HRS No.	Part No.	Applicable Dia. ϕ	Remark
CL701-0060-6	HRFC-PAJB-1	ϕ 2mm	GI Fibre Only
CL701-0061-9	HRFC-PAJB-2		SM Fibre Only

Note: Above panel jack housing must be used with the ferrules.

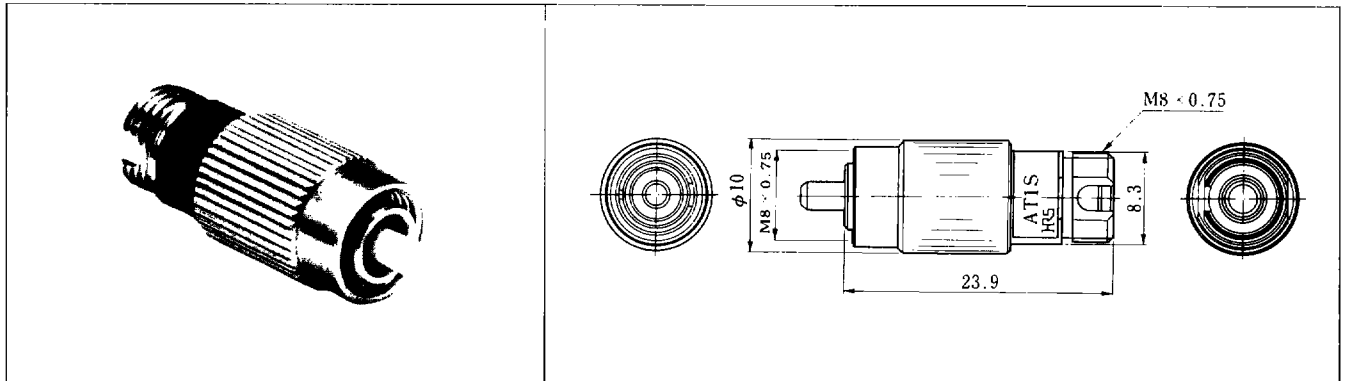
OF OPTICAL FIBER CONNECTOR

● ARRANGEMENT PANEL JACK FERRULE:

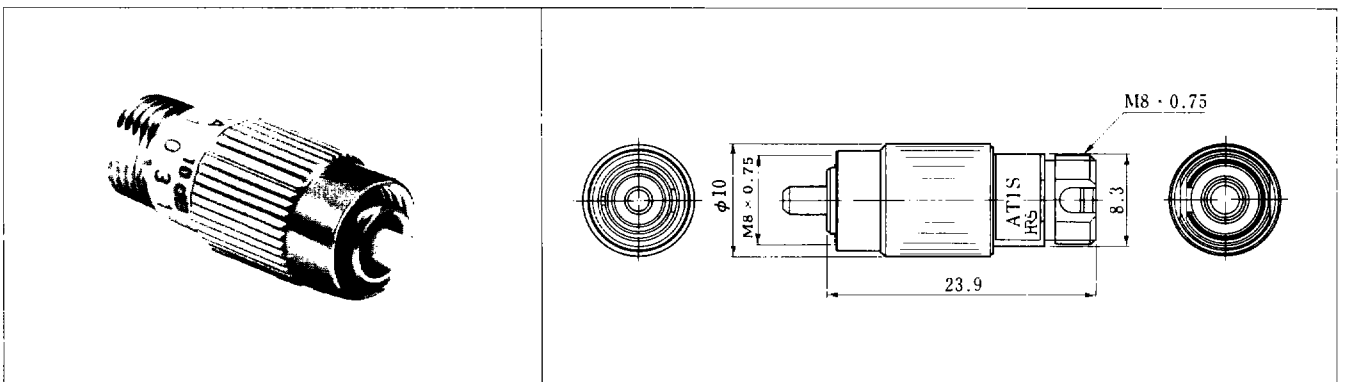


OF OPTICAL FIBER CONNECTOR

● FIXED ATTENUATOR



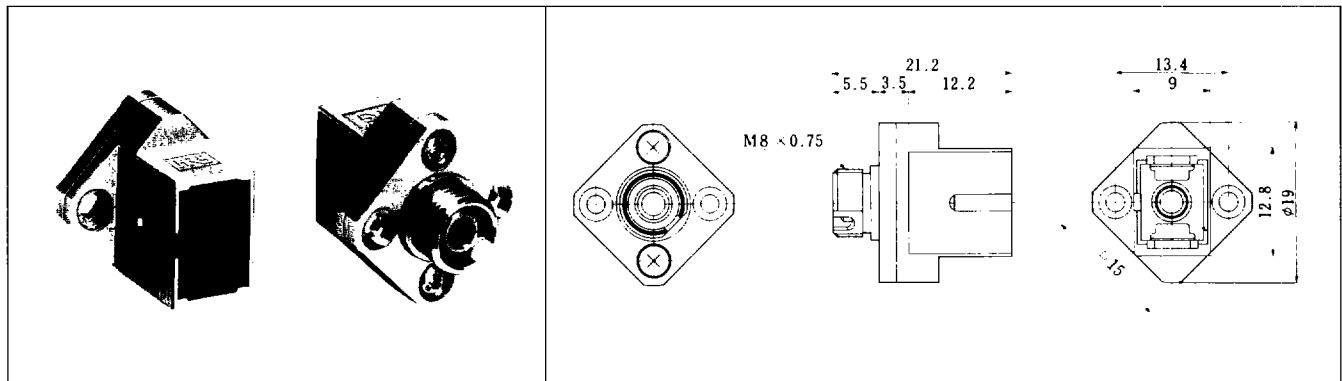
HRS No.	Part No.	Attenuator (±1.5dB)	Applicable Optical Fibre Cord	Return Loss
CL701-0046-5	HRFC-AT1S-B05A	5dB	SGI-50/125	>22dB
CL701-0047-8	HRFC-AT1S-B10A	10dB		>22dB
CL701-0048-0	HRFC-AT1S-B15A	15dB		>22dB
CL701-0049-3	HRFC-AT1S-B20A	20dB		>22dB



HRS No.	Part No.	Attenuator (±1.5dB)	Applicable Optical Fibre Cord	Return Loss
CL701-0042-4	HRFC-AT1S-A05A	5dB	SM-9.5/125	>22dB
CL701-0043-7	HRFC-AT1S-A10A	10dB		>22dB
CL701-0044-0	HRFC-AT1S-A15A	15dB		>22dB
CL701-0045-2	HRFC-AT1S-A20A	20dB		>22dB
CL701-0079-4	HRFC-AT1K-A05A	5dB		>40dB
CL701-0080-3	HRFC-AT1K-A10A	10dB		>40dB
CL701-0081-6	HRFC-AT1K-A15A	15dB		>40dB
CL701-0082-9	HRFC-AT1K-A20A	20dB		>40dB

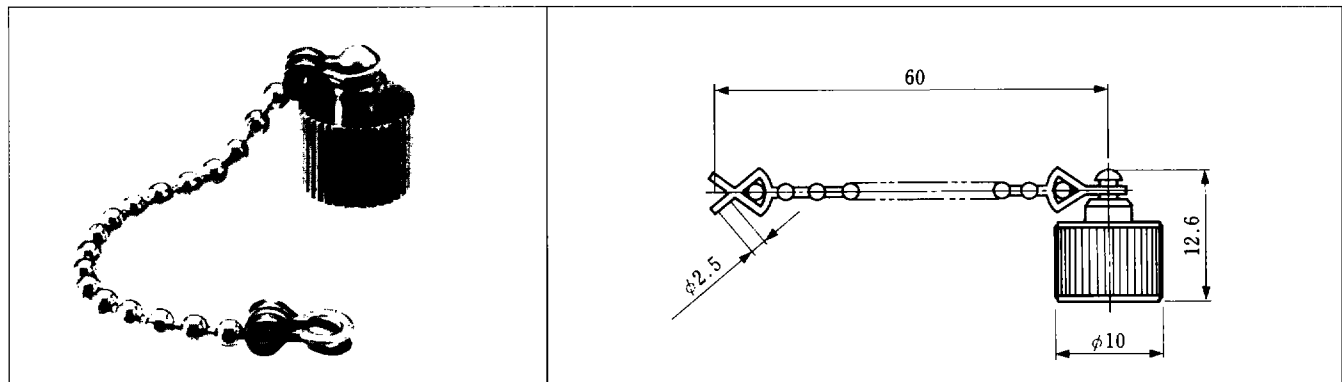
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● ADAPTOR CHANGE



HRS No.	Part No.	Remark
CL704-0021-3	HSCJ-HRFCJ-B	SC-FC Adaptor Change

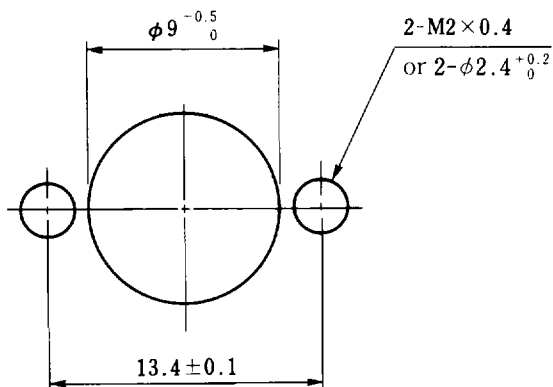
● CAP



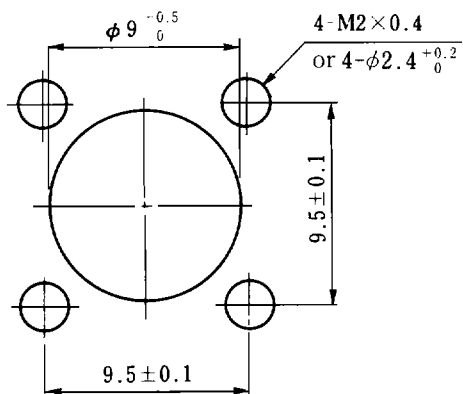
HRS No.	Part No.
CL701-0019-2	HRFC-C1

<Mounting Hole Dimensions>

- HRFC-PA1-G1
- HRFC-PAJB-1, 2

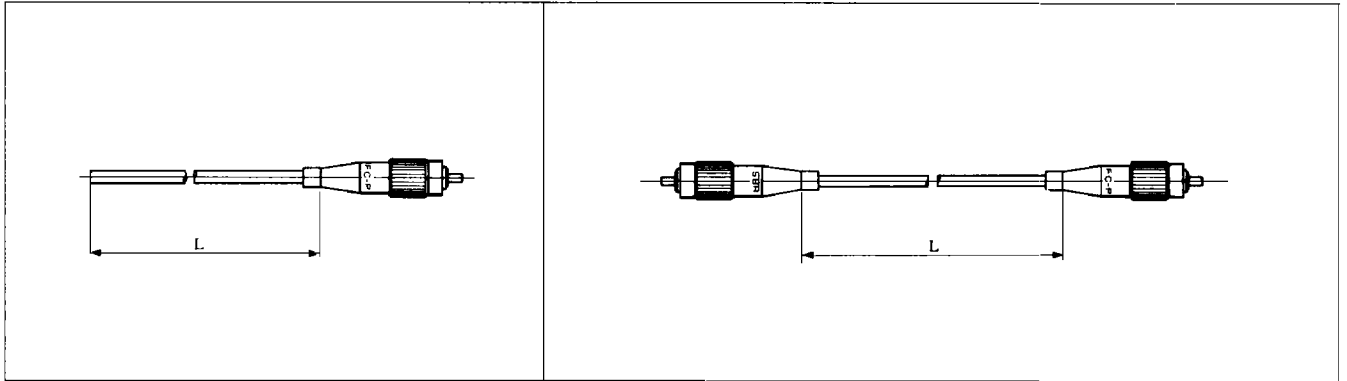


- HRFC-R1, R2
- HRFC-PAJ-1, 2



OF OPTICAL FIBER CONNECTOR

● CONNECTOR WITH CORD



HRS No.	Part No.	Mounting Side of Connector	Optical Fibre	Polishing Type	Cord Dia. ϕ	Ferrule
CL701-0017-7	HRFC-FP2-F1B-L	Both Side	SGI-50/125	Flat	ϕ 3	Stainless steel + alumina
CL701-0018-0	HRFC-FP1-F1B-L	Single Side				
CL701-1006-6	HRFC-FP2-F1A-L	Both Side	SM-9.5/125			
CL701-1007-9	HRFC-FP1-F1A-L	Single Side				
CL701-1002-5	HRFC-SP2-F1A-L	Both Side	SM-9.5/125	PC (R60)		
CL701-1003-8	HRFC-SP1-F1A-L	Single Side				
CL701-1027-6	HRFC-SP2-F3B-L	Both Side	SGI-50/125	PC (R20)	ϕ 2	Zirconia
CL701-1026-3	HRFC-SP2-F3A-L	Both Side	SM-9.5/125			
CL701-1028-9	HRFC-SP2-F3P-L	Both Side	SGI-50/125			
CL701-1029-1	HRFC-SP2-F3Q-L	Both Side	SM-9.5/125			
---	HRFC-ASP1-F3A-L	Single Side	SM-9.5/125	Advanced PC (R20)	ϕ 3	Zirconia
---	HRFC-ASP2-F3A-L	Both Side				
---	HRFC-ASP1-F3Q-L	Single Side				
---	HRFC-ASP2-F3Q-L	Both Side				