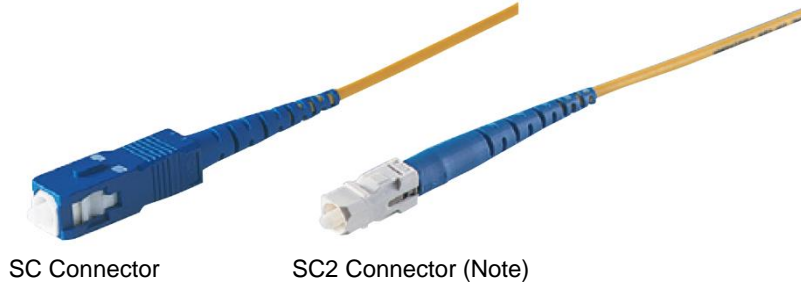# Single-fiber Optical Connector

Fujikura Simplex/Duplex Patch Cords support following optical connectors.
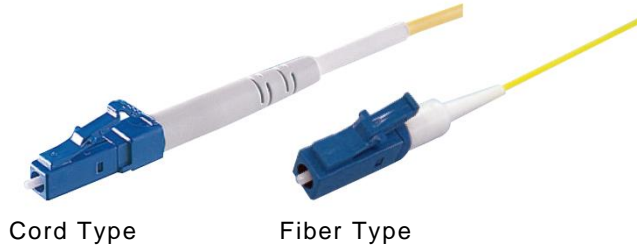
SC Connector

SC Connector   SC2 Connector (Note)
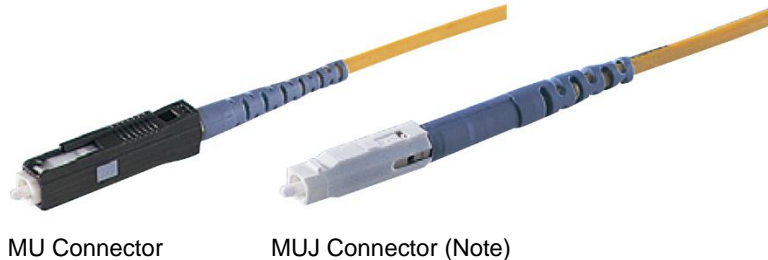(Note) Special tools are required for attaching and detaching.

LC Connector

Cord Type   Fiber Type

MU Connector

MU Connector   MUJ Connector (Note)
(Note) Special tools are required for attaching and detaching.

FC Connector

Cord Type   Fiber Type

Duplex Type Connector

SCF Connector (SCF)   LC Connector (DXLC)

Contact us

Single-fiber Optical Connector Lineup for Simplex/Duplex Patch Cords

Optical Connector Type		Single Mode Fiber (SMF) / Multimode Fiber (MMF)							
		Polishing Method (MMF can only be PC polished.)				Cord Size [mm]			
						Fiber	Simplex Cord		Zipcord
		PC	SPC	UPC	APC	Ø 0.9	Ø 2	Ø 2.8	Ø 2 x 2
SC	SC	✓	✓	✓	✓	✓	✓	✓	✓
	SC2	✓	✓	✓		✓	✓	✓	✓
	SCF	✓	✓	✓		✓	✓	✓	✓
LC	LC	✓	✓	✓		✓	✓		✓
	DXLC	✓	✓	✓		✓	✓		✓
MU	MU	✓	✓	✓		✓	✓		✓
	MUJ	✓	✓	✓		✓	✓		✓
FC	FC	✓	✓	✓	✓	✓	✓	✓	✓

Optical Specifications of Single-fiber Optical Connector

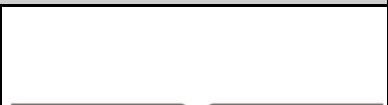| Item		Single Mode	Multimode
Fiber Type		SM10/125 (R15, R30)	GI50/125 GI62.5/125
Applicable Optical Connectors		SC, LC, MU, FC	
Insertion Loss (against Master)	PC Polishing	0.5 dB or less	0.3 dB or less
	SPC Polishing		Not Supported
	UPC Polishing		
	APC Polishing *1		
Return Loss	PC Polishing	- *2	- *2
	SPC Polishing	40 dB or more	Not Supported
	UPC Polishing	50 dB or more	
	APC Polishing *1	60 dB or more	

*1: SC2, LC and MU connectors do not support APC polishing.
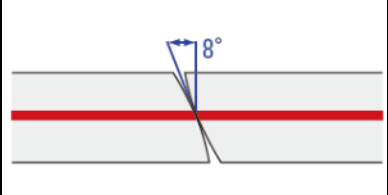*2: If specification of the return loss is required, please contact Fujikura Sales.

Methods for Polishing Optical Fiber Connectors

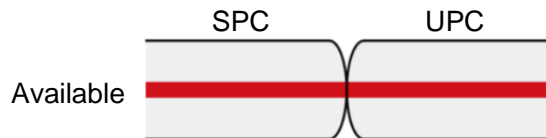■Please choose a polishing method that meets the return loss specifications of Patch Cord.

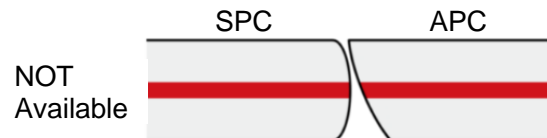| Polishing Method and End face Shape of the ferrule		Features	Return Loss (SM)
Physical Contact (PC) *3		Establishes a secure connection by aligning spherical polished end faces to ensure close contact between fibers.	-
Super PC (SPC) *4		PC polishing that helps to reduce reflection.	40dB
Ultra PC (UPC) *4		PC polishing that further reduces reflection compared to SPC.	50dB
Angled PC (APC)	8°	Helps further reduce reflection by obliquely polishing to a spherical compared to UPC.	60dB

*3. PC stands for Physical Contact.
*4. For AdPC cases, please specify when placing your order.

Availability of connections in different polished end faces

It is able to connect PC, SPC and UPC as it has spherical end face. For example, SPC end face is able to connect UPC end face. In that case, the return loss is as same as SPC-SPC connection. On the other hand, APC cannot connect to PC, SPC or UPC as it has angled end face.

Available — SPC UPC
The return loss is as same as SPC-SPC connection

NOT Available — SPC APC