



FC PATCHCORDS/PIGTAILS



FEATURES

- Connector's design complies with IEC 61754-13 standard
- Extremely low insertion loss and high return loss
- End-face geometry and quality superior than IEC and Telcordia standards
- LSZH, OFNP, OFNR cable jacket
- RoHS and REACH materials compliant

OPTICAL CHARACTERISTICS

Item	Parameter		Reference
	Single mode	Multimode	
Insertion loss	Random mated average \leq 0.07dB; Random mated for 97% \leq 0.12dB	Random mated average \leq 0.05dB; Random mated for 97% \leq 0.10dB	IEC 61300-3-34
Return loss	\geq 70dB (APC); \geq 55dB (UPC)	\geq 45dB	IEC 61300-3-6

END-FACE GEOMETRY

Item	PC (Ref: IEC 61755-3-1)	APC (Ref: IEC 61755-3-2)
Radius of curvature (mm)	10 to 15	6.5 to 9
Fiber height (nm)	-30 to 30	-30 to 30
Apex offset (μ m)	0 to 30	0 to 30
APC angle ($^{\circ}$)	/	7.8 to 8.2
Key error ($^{\circ}$)	/	-0.2 to 0.2

END-FACE QUALITY (SM)

Zone	Range (μ m)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

END-FACE QUALITY (MM)

Zone	Range (μ m)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	IEC 61300-3-35:2015
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

CONNECTOR TYPES

Type	Reference	Note	
FC	IEC 61754-13	Single mode simplex	APC: Green boots UPC: Black boots
		Single mode duplex	APC: Green boots UPC: Black boots
		Multimode simplex	PC: Black boots
		Multimode duplex	PC: Black boots

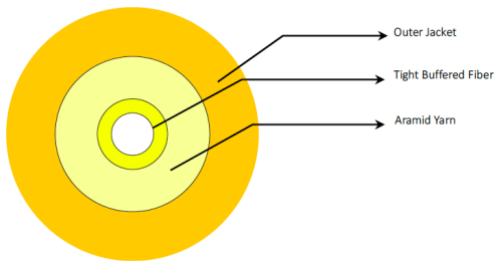


MECHANICAL CHARACTERISTICS

Test	Conditions	Reference
Endurance	500 matings	IEC 61300-2-2
Vibration	Frequency: 10 to 55Hz, Amplitude: 0.75mm	IEC 61300-2-1
Cable retention	100N (patch cable); 5N (pigtail)	IEC 61300-2-4
Strength of coupling mechanism	80N for 2 to 3mm cable	IEC 61300-2-6
Cable torsion	15N for 2 to 3mm cable	IEC 61300-2-5
Fall	10 drops, 1m drop height	IEC 61300-2-12
Static lateral load	1N for 1h (patch cable); 0.2N for 5min (pigtail)	IEC 61300-2-42
Cold	-25°C, 96h duration	IEC 61300-2-17
Dry heat	+70°C, 96h duration	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22
Humidity	+40°C at 93%, 96h duration	IEC 61300-2-19

CABLE SPECIFICATIONS

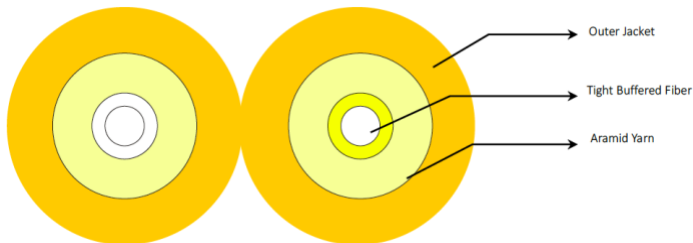
Cable Structure (Simplex)



Cable Characteristics (Simplex)

Fiber count	1			
Outer diameter (mm)	1.5 to 1.6	1.70 to 1.80	1.80 to 2.00	2.85 to 3.05
Nominal weight (kg/km)	3.0	3.3	4.0	8.0
Max. tensile strength (N)	Short term	50	70	70
	Long term	20	40	40
Max. crush resistance (N/100mm)	Short term	500		
	Long term	100		
Min. bending radius (mm)	Short term	20D		
	Long term	10D		
Sheath compound	RoHS compliant LSZH/OFNP/PVC			
Color	Customized			
Strength members	Aramid yarn			
Temperature (°C)	Storage or transportation	-25 to 70		
	Operation	-25 to 70		

Cable Structure (Duplex)



Cable Characteristics (Duplex)

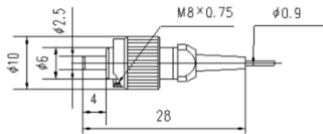
Fiber Count	2			
Out diameter (mm)	(1.55 to 1.65) x (3.20 to 3.60)	(1.70 to 1.80) x (3.60 to 4.20)	(1.80 to 2.00) x (3.90 to 4.30)	(2.65 to 2.85) x (5.30 to 5.80)
Nominal weight(kg/km)	5.7	6.7	8.2	13.2
Max. tensile strength (N)	Short-term	120	160	200
	Long-term	60	80	100
Max. crush	Short term	1000		



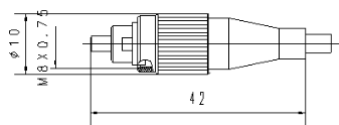
resistance (N/100mm ²)	Long term	300
Min. bending radius (mm)	Short term	20D
	Long term	10D
Sheath compound	RoHS compliant LSZH/OFNP/PVC	
Color	Customized	
Strength members	Aramid yarn	
Temperature (°C)	Storage or transportation	-25 to 70
	Operation	-25 to 70

DIMENSIONAL DIAGRAMS

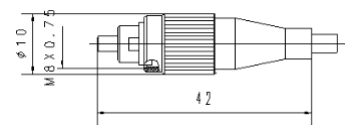
FC ϕ 0.9mm connector



FC ϕ 2.0mm connector

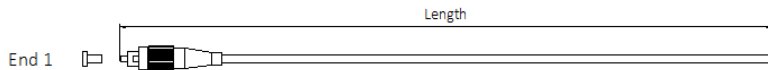


FC ϕ 3.0mm connector

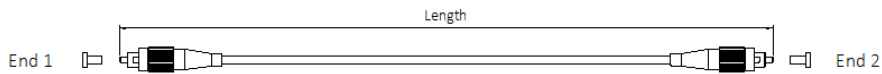


SCHEMATIC DIAGRAMS

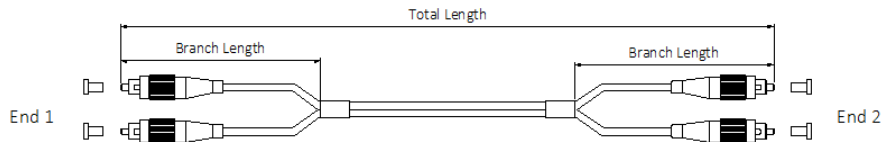
FC pigtail



FC simplex patchcord



FC duplex patchcord





ORDER INFORMATION

PATFC — — — — — — — — —

Cable	Connector end1	Connector end2	Fiber type	Cable Ø	Cable jacket material	Cable color	Cable length (xxx)
1: Simplex 2: Duplex	1: FCAPC 2: FCUPC 3: None	1: FCAPC 2: FCUPC 3: None	1: G652D 2: G657A1 3: G657A2 4: G657B3 5: OM1 6: OM2 7: OM3 8: OM4 9: Others	1: 250µm bare fiber 2: 900µm tight buffer 3: 1.6mm 4: 2.0mm 5: 3.0mm 6: 4.8mm 7: Customized	1: LSZH 2: LSZH CPR 3: OFNP 4: OFNR 5: Hytrel 6: TPU 7: PVC 8: Customized	1: Blue 2: Orange 3: Green 4: Brown 5: Gray 6: White 7: Red 8: Black 9: Yellow 10: Violet 11: Pink 12: Aqua 13: Magenta 14: Customized	0D5: 0.5m 001: 1.0m 1D5: 1.5m 010: 10m ...