



LC PATCHCORDS/PIGTAILS



FEATURES

- Connector's design complies with IEC 61754-20 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
- Short boot option available
- Uniboot option available

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)	7 to 15	6 to 12
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	
LC	IEC 61754-20	Single mode simplex	APC: Green connectors, Green boots (for 0.9mm) / White boots (for 2.0/3.0mm) UPC: Blue connectors, White boots
		Single mode duplex	APC: Green connectors, Green boots (for 0.9mm) / White boots (for 2.0/3.0mm) UPC: Blue connectors, White boots
		Multimode simplex	PC: Grey Connectors, White boots
		Multimode duplex	PC: Grey Connectors, White boots

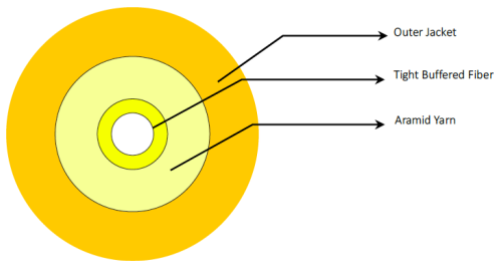


MECHANICAL CHARACTERISTICS

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

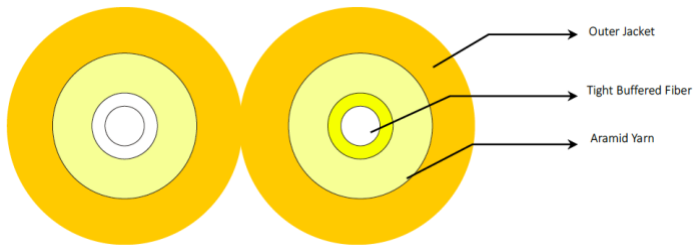
Cable Structure (Simplex)



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	90
	Long term	20	40	50
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)



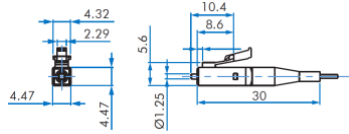
Cable Characteristics (Duplex)

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	300
	Long-term	60	80	160
Max. crush	Short term	1000		

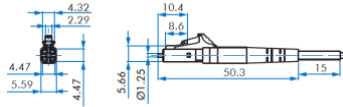
resistance (N/100mm ²)	Long term	300
Min. bending radius (mm)	Short term	20D
	Long term	10D
Sheath compound	RoHS compliant LSZH/OFNP/PVC	
Color	Customized	
Strength members	Aramid yarn	
Temperature (°C)	Storage or transportation	-25 to 70
	Operation	-25 to 70

DIMENSIONAL DIAGRAMS

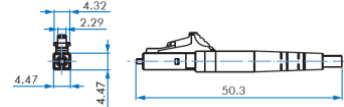
LC \varnothing 0.9mm connector



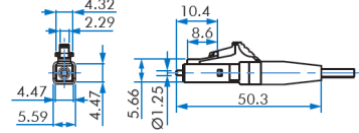
LC \varnothing 2.0mm connector



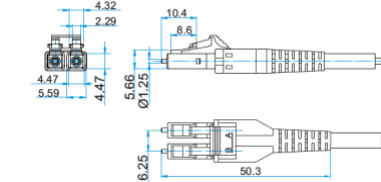
LC \varnothing 3.0mm connector



LC short boot connector

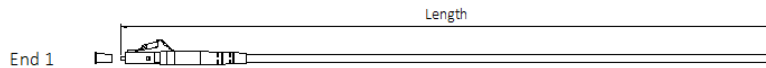


LC uniboot connector

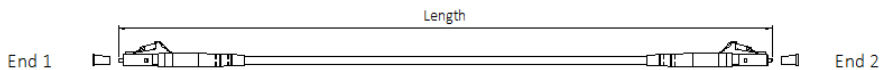


SCHEMATIC DIAGRAMS

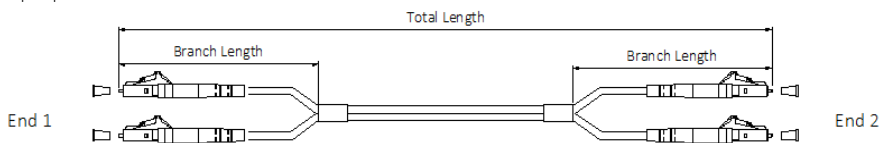
LC pigtail



LC simplex patchcord



LC duplex patchcord



ORDER INFORMATION



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