

LC Uniboot Specification



Application

- 1.Data Centers
- 2.Local Area Networks
- 3.High-Density Applications
- 4.Interconnects
- 5.Cross-connects

Features

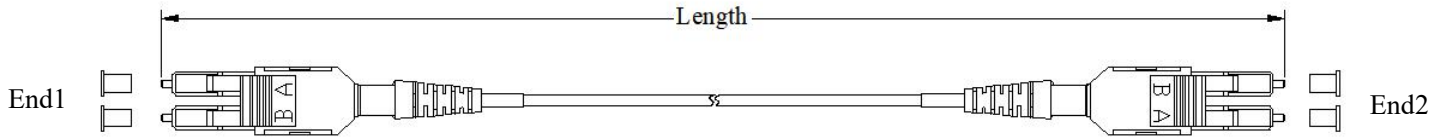
- 1.Uniboot with a Single Housing
- 2.Low insertion loss and added loss.
- 3.Height of attenuation.
- 4.High back loss, small volume, light weight.
- 5.End-face geometry and quality superior than IEC and Telcordia standards.
- 6.LSZH, OFNP, OFNR cable jacket.
- 7.Mechanical performance: IEC 61754-20 standard.
- 8.RoHS and REACH materials compliant.

Connector Types

Type	Reference	Note	
LC	IEC 61754-20	Single mode	UPC: Blue connectors , White boots
		Multimode	UPC: Grey or Aqua Connectors , White boots

Dimensional Diagrams

1.LC Uniboot 2.0mm patchcord



Patch cord versions

Jumper tolerance requirement	
Overall length (L) (M)	length of tolerance (CM)
$0 < L \leq 20$	+10/-0
$20 < L \leq 40$	+15/-0
$L > 40$	+0.5%L/-0

Cable Structure



Cable Parameters

Fiber account	OD(mm)	Nominal Weight (kg/km)	Max.tensile Strength(N)		Max.Crush Resistance (N/100mm)		Min.Bending Radius(mm)	
			Short-term	Long-term	Short-term	Long-term	Dynamic	Static
2	2.0±0.15	6.8	150	80	500	150	20D	10D

Optical Characteristics

Item	Parameter		Reference
	Single mode	Multimode	
Insertion loss	Typical value≤0.15dB ; Maximum≤0.30	Typical value≤0.15dB ; Maximum≤0.30	IEC 61300-3-34
Return loss	≥ 50dB (UPC)	≥ 30dB (UPC)	IEC 61300-3-6

End-Face Geometry

Item	UPC (Ref: IEC 61755-3-1)	APC (Ref: IEC 61755-3-2)
Radius of curvature (mm)	7 to 25	5 to 12
Fiber height (nm)	-100 to 100	-100 to 100
Apex offset (μm)	0 to 50	0 to 50
APC angle (°)	/	8° ±0.2°
Key error (°)	/	0.2° max

End-Face Quality (SM)

Zone	Range (μm)	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 (μm)	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	

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