

E2000 Fiber Optic Patch Cord Specification



Application

- 1.Optical fiber communication systems engineering.
- 2.Fiber optic data communication network.
- 3.Fiber CATV engineering.
- 4.Other optical technology tests.

Features

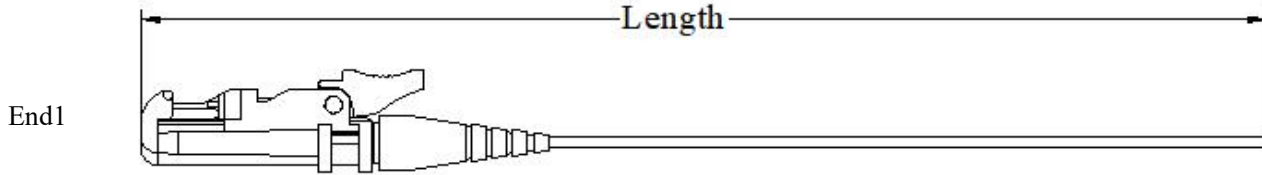
- 1.The style is diverse, the interface is complete.
- 2.Low insertion loss and added loss.
- 3.Height of attenuation.
- 4.High back loss, small volume, light weight.
- 5.End-face geometry and quality superior than IEC and Telcordia standards.
- 6.LSZH, OFNP, OFNR cable jacket.
- 7.Mechanical performance: IEC 61754-15 standard.
- 8.RoHS and REACH materials compliant.

Connector Types

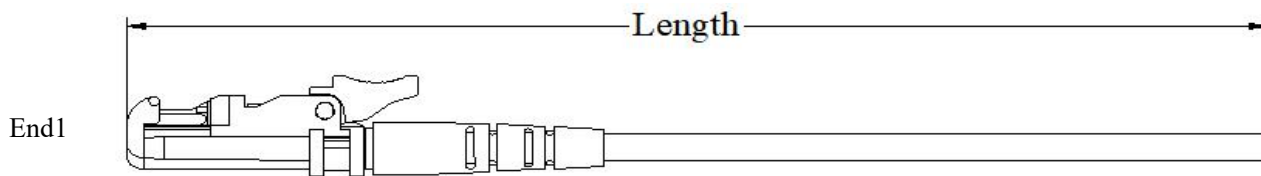
Type	Reference	Note	
E2000	IEC 61754-15	Single mode simplex	APC: Green connectors, Green boots UPC: Blue connectors, Blue boots
		Single mode duplex	APC: Green connectors, Green boots UPC: Blue connectors, Blue boots

Dimensional Diagrams

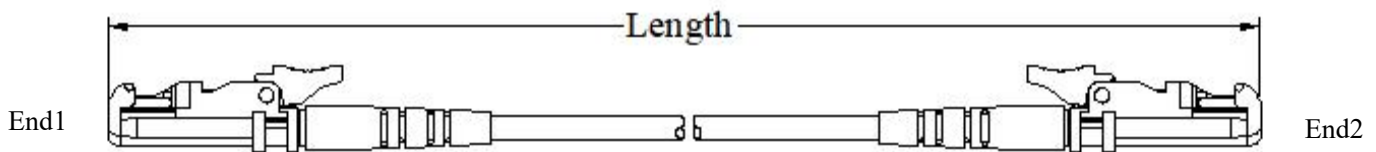
1.E2000 0.9mm simplex pigtail



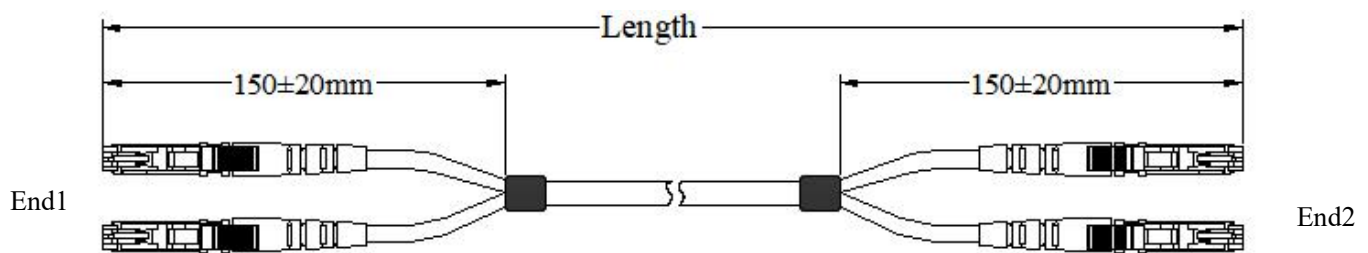
2.E2000 2.0mm&3.0mm simplex pigtail



3.E2000 2.0mm&3.0mm simplex patchcord



4.E2000 2.0mm&3.0mm duplex 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

Optical Characteristics

Item	Parameter		Reference
	Single mode		
Insertion loss	Typical value \leq 0.15dB;Maximum \leq 0.30		IEC 61300-3-34
Return loss	\geq 60dB (APC); \geq 50dB (UPC)	\geq 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)	10 to 25	5 to 12
Fiber height (nm)	-100 to 100	-100 to 100
Apex offset (μ m)	0 to 50	0 to 50
APC angle ($^{\circ}$)	/	$8^{\circ} \pm 0.2^{\circ}$
Key error ($^{\circ}$)	/	0.2° max

End-Face Quality

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	

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 $^{\circ}$ C, 96h duration	IEC 61300-2-17
Dry heat	+70 $^{\circ}$ C, 96h duration	IEC 61300-2-18
Change of temperature	-25 $^{\circ}$ C to +70 $^{\circ}$ C, 12 cycles	IEC 61300-2-22
Humidity	+40 $^{\circ}$ C at 93%, 96h duration	IEC 61300-2-19