

LC (Push-Pull) Specification



Application

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

Features

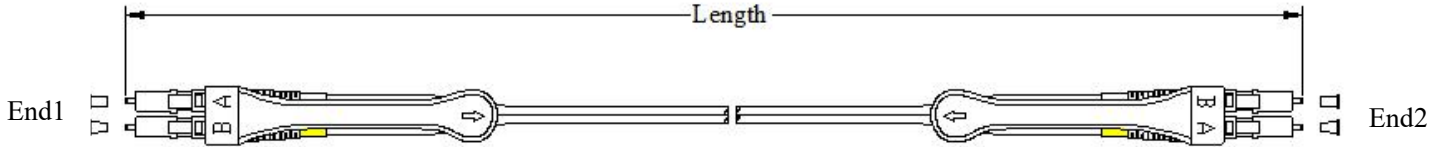
- 1.Uniboot with a Single Housing
- 2.Unique Push-Pull Design and Function
- 3.Low insertion loss and added loss.
- 4.Height of attenuation.
- 5.High back loss, small volume, light weight.
- 6.End-face geometry and quality superior than IEC and Telcordia standards.
- 7.LSZH, OFNP, OFNR cable jacket.
- 8.Mechanical performance: IEC 61754-20 standard.
- 9.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

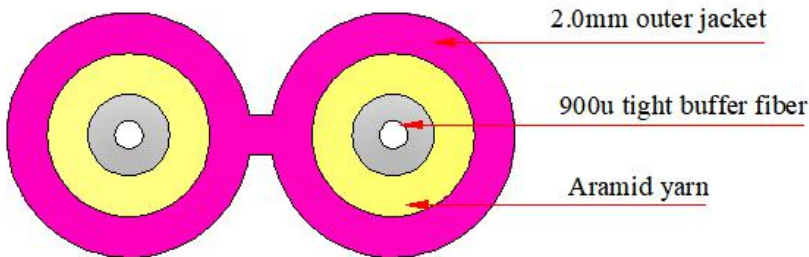
1.LC LC (Push-Pull) 2.0mm patchcord



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*4.1 | 8.2 | 200 | 100 | 1000 | 200 | 20D | 10D |

Optical Characteristics

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