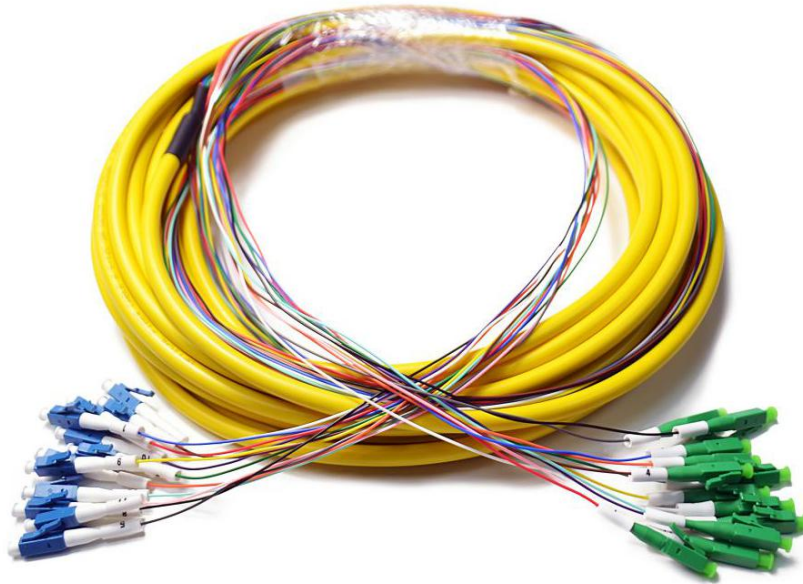


LC --- LC Pre-terminated Cable



Application

- 1.Optical fiber communication systems engineering
- 2.Fiber optic data communication network
- 3.Connected with trunk cables on one end, equipment port on the other end.
- 4.Connected with transfer modules on one end, equipment port on the other end.

Features

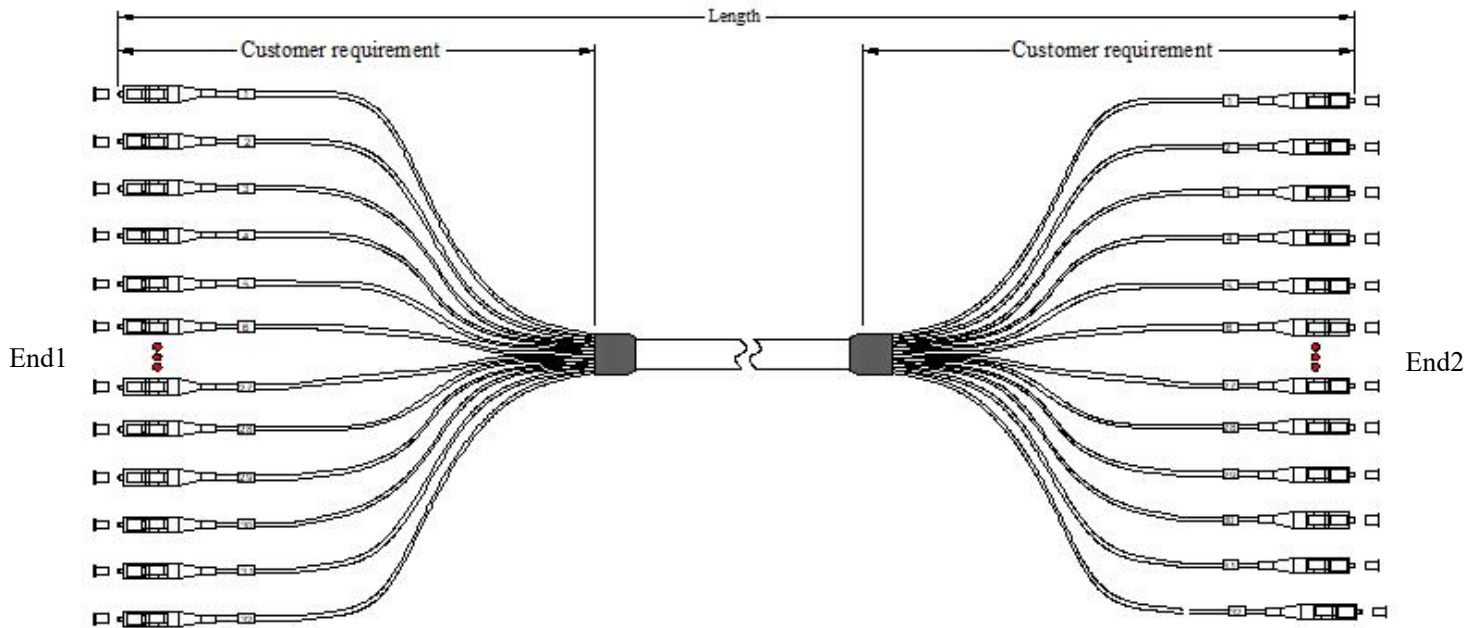
- 1.100% pre-terminated and tested in factory to ensure transfer performance.
- 2.Rapid configuration and networking, reduce installation time.
- 3.Supports 40G and 100G network applications.
- 4.Low insertion loss and added loss.
- 5.Supports up to 12F, 24F, 48F, 72F, 96F, 144F, customized products are available.
- 6.High back loss, small volume, light weight.
- 7.End-face geometry and quality superior than IEC and Telcordia standards.
- 8.LSZH, OFNP, OFNR cable jacket.
- 9.Mechanical performance: IEC 61754-20 standard.
- 10.RoHS and REACH materials compliant.

Connector Types

| Type | Reference | Note | |
|------|--------------|---------------------|---|
| LC | IEC 61754-20 | Single mode simplex | APC: Green connectors, Green boots UPC: Blue connectors, White boots |
| | | Multimode simplex | UPC: Grey Connectors, White boots |

Dimensional Diagrams

1.LC --- LC Pre-terminated Cable



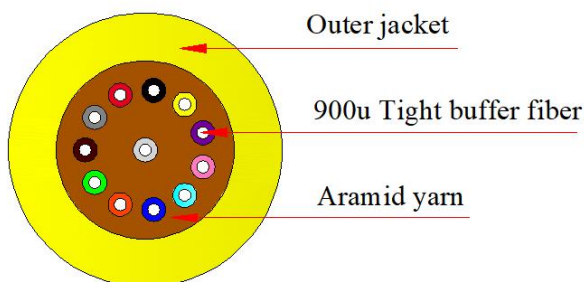
Patch cord versions

| 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 | 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 | ≥ 60 dB (APC); ≥ 50 dB (UPC) | ≥ 30 dB (UPC) | IEC 61300-3-6 |

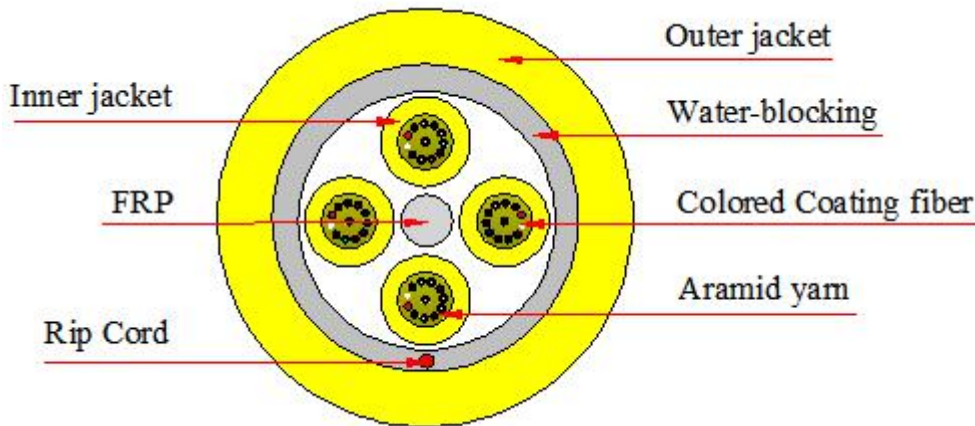
Cable Structure



Cable Parameters

| Cable Count | Outside Diameter | Tight buffer Diameter | Weight (KG) | Minimum allowable Tensile Strength (N) | | Minimum allowable Crush Load (N/100mm) | | Minimum Bending Radius (MM) | | Storage temperature |
|-------------|------------------|-----------------------|-------------|--|-----------|--|-----------|-----------------------------|-----------|---------------------|
| | (MM) | (MM) | | Short term | Long term | Short term | Long term | Short term | Long term | (°C) |
| 04 | 5.0 | 0.9 | 22.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 06 | 5.0 | 0.9 | 23.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 08 | 5.5 | 0.9 | 28.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 12 | 6.0 | 0.9 | 38.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 16 | 7.2 | 0.9 | 42.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 24 | 8.3 | 0.9 | 58.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |
| 48 | 10.0 | 0.9 | 96.00 | 600 | 200 | 1000 | 200 | 20D | 10D | -40+60 |

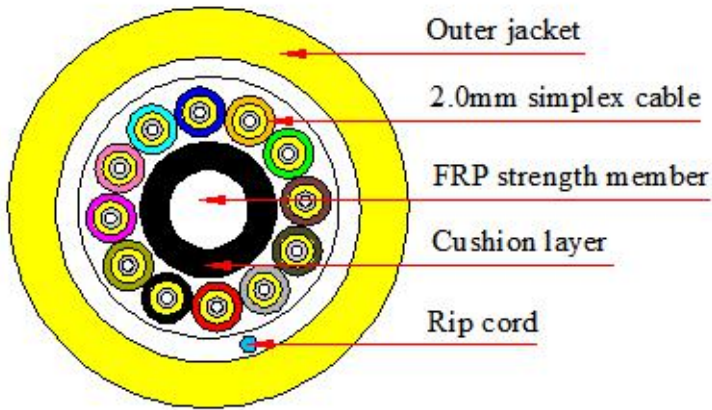
Cable Structure



Cable Parameters

| Fiber account | OD(mm) | Nominal Weight (kg/km) | Max.tensile Strength (N) | | Max.Crush Resistance (N/100mm) | | Min.BendingRadius (mm) | |
|---------------|----------|------------------------|--------------------------|-----------|--------------------------------|-----------|------------------------|--------|
| | | | Short-term | Long-term | Short-term | Long-term | Dynamic | Static |
| 12 | 3.0±0.5 | 7.8 | 150 | 80 | 500 | 150 | 20D | 10D |
| 24 | 9.0±0.5 | 76 | 300 | 160 | 1000 | 300 | 20D | 10D |
| 36 | 9.0±0.5 | 78 | 500 | 180 | 1000 | 300 | 20D | 10D |
| 48 | 9.0±0.5 | 79 | 500 | 180 | 1000 | 300 | 20D | 10D |
| 72 | 11.2±0.5 | 126 | 600 | 200 | 1000 | 300 | 20D | 10D |
| 96 | 13.5±0.5 | 178 | 1000 | 300 | 1000 | 300 | 20D | 10D |
| 144 | 17.5±0.5 | 285 | 1000 | 300 | 1000 | 300 | 20D | 10D |
| 288 | 22.5±0.5 | 450 | 1000 | 300 | 1000 | 300 | 20D | 10D |

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) | | Storage temperature |
|---------------|----------|------------------------|-------------------------|-----------|--------------------------------|-----------|------------------------|--------|---------------------|
| | | | Short-term | Long-term | Short-term | Long-term | Dynamic | Static | |
| 4 | 7.5±0.5 | 51 | 270 | 90 | 1000 | 300 | 20D | 10D | -20+60 (°C) |
| 6 | 9.0±0.5 | 68 | 330 | 110 | 1000 | 300 | 20D | 10D | -20+60 (°C) |
| 8 | 10.5±0.5 | 88 | 330 | 110 | 1000 | 300 | 20D | 10D | -20+60 (°C) |
| 12 | 12.5±0.5 | 128 | 430 | 140 | 1000 | 300 | 20D | 10D | -20+60 (°C) |
| 24 | 15.5±0.5 | 198 | 660 | 220 | 1000 | 300 | 20D | 10D | -20+60 (°C) |
| 48 | 20.5±0.5 | 246 | 660 | 220 | 1000 | 300 | 20D | 10D | -20+60 (°C) |

End-Face Geometry LC

| 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 |