

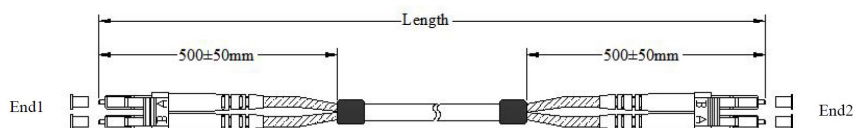


### Connector Types

| Type | Reference    | Conformance        | Note                                                                    |
|------|--------------|--------------------|-------------------------------------------------------------------------|
| LC   | IEC 61754-20 | Single mode duplex | APC: Green connectors, green boots<br>UPC: Blue connectors, white boots |
|      |              | Multimode duplex   | UPC: Grey Connectors, white boots                                       |

### Dimensional Diagrams

#### 1. CPRI LC Outdoor Cable Assemblies



### 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                |

### Product Description

BCP® CPRI patch cords are factory assembled connectors to fibre patch cables and are used to mate with connectors of different passive ODFs or to plug into fibre optic active equipment.

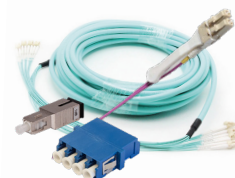
We offer a full range of fibre patch cords with various connectors, in simplex and duplex and cables in different colours. A choice of jacket thickness is also available, such as 900um, 2mm and 3mm. Some connectors have extra options for uni-boots, angled boots and short boots.

### Features & Benefits

- Mechanical performance: IEC 61754-20 Standard
- Easily add/install jumper cables for a future expansion
- Low insertion loss and added loss
- Height of attenuation
- Flexibility with small bending radius and excellent cable routing properties
- End-face geometry and quality superior than IEC and Telcordia standards
- The materials in the jumper cable are all-weather and UV-resistant
- RoHS and REACH compliant materials

### Applications

- Multi-purpose outdoor
- For connection between distribution box and RRH
- Deployment in remote radio head cell tower applications



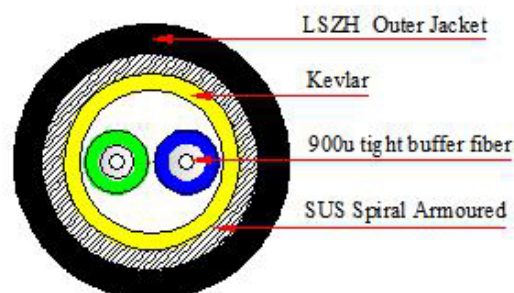
### Cable Structure



### Cable Parameters

|                                        |            |          |
|----------------------------------------|------------|----------|
| Cable Count                            |            | 2        |
| Outer Sheath Diameter (mm)             |            | 5.0±0.2  |
| Weight (kg)                            |            | 30       |
| Minimum Allowable Tensile Strength (N) | Short Term | 800      |
|                                        | Long Term  | 400      |
| Minimum Allowable Crush Load (N/100mm) | Short Term | 2000     |
|                                        | Long Term  | 1000     |
| Minimum Bending Radius (mm)            | Short Term | 20D      |
|                                        | Long Term  | 10D      |
| Storage Temperature °C                 |            | -20 ~+70 |

### Cable Structure



### Cable Parameters

|                                        |            |          |
|----------------------------------------|------------|----------|
| Cable Count                            |            | 2        |
| Outer Sheath Diameter (mm)             |            | 5.0±0.2  |
| Weight (kg)                            |            | 45       |
| Minimum Allowable Tensile Strength (N) | Short Term | 400      |
|                                        | Long Term  | 800      |
| Minimum Allowable Crush Load (N/100mm) | Short Term | 2000     |
|                                        | Long Term  | 3000     |
| Minimum Bending Radius (mm)            | Short Term | 20D      |
|                                        | Long Term  | 10D      |
| Storage Temperature °C                 |            | -20 ~+70 |

### Cable Structure



### Cable Parameters

|                                        |            |          |
|----------------------------------------|------------|----------|
| Cable Count                            |            | 2        |
| Outer Sheath Diameter (mm)             |            | 7.0±0.3  |
| Weight (kg)                            |            | 50       |
| Minimum Allowable Tensile Strength (N) | Short Term | 600      |
|                                        | Long Term  | 1000     |
| Minimum Allowable Crush Load (N/100mm) | Short Term | 1000     |
|                                        | Long Term  | 2000     |
| Minimum Bending Radius (mm)            | Short Term | 20D      |
|                                        | Long Term  | 10D      |
| Storage Temperature °C                 |            | -20 ~+70 |

## Cable Structure



## Cable Parameters

|                                        |                                   |
|----------------------------------------|-----------------------------------|
| Cable Count                            | 2                                 |
| Outer Sheath Diameter (mm)             | 7.0±0.3                           |
| Weight (kg)                            | 68                                |
| Minimum Allowable Tensile Strength (N) | Short Term 600<br>Long Term 1000  |
| Minimum Allowable Crush Load (N/100mm) | Short Term 2000<br>Long Term 3000 |
| Minimum Bending Radius (mm)            | Short Term 20D<br>Long Term 10D   |
| Storage Temperature °C                 | -20 ~+70                          |

## 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    | ≥60dB (APC); ≥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 (Single Mode)

| 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 (Multimode)

| 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                | 400N (main cable); 50N (ranch part)                | 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 (main cable); 0.2N for 5min (ranch part) | 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 |

Ordering Information

Use combinations of **bold** letters and numbers to create part numbers for ordering.

| Type                                                                         |                                                                                 | Connector Type B                                                           |                                          | Fibre Type                                                                                                        |                                                                      | Armouring*                                              |                                                                                                                    | Material                                     |                           |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------|
| <b>B/CPR</b><br><b>B/FXS</b><br><b>B/IPX</b><br><b>B/NSN</b><br><b>B/WPR</b> | CPR I<br>Full AXS<br>IPFX<br>NSN<br>Waterproof                                  | <b>ST</b><br><b>SC</b><br><b>MU</b><br><b>LC</b><br><b>FC</b><br><b>E2</b> | ST<br>SC<br>MU<br>LC<br>FC<br>E2000      | <b>A1</b><br><b>A2</b><br><b>B3</b><br><b>M1</b><br><b>M2</b><br><b>M3</b><br><b>M4</b><br><b>M5</b><br><b>S2</b> | G657A1<br>G657A2<br>G657B3<br>OM1<br>OM2<br>OM3<br>OM4<br>OM5<br>OS2 | <b>AM</b>                                               | Armoured                                                                                                           | <b>H</b><br><b>L</b><br><b>E</b><br><b>P</b> | HDPE<br>LSZH<br>PE<br>PVC |
| ▲                                                                            |                                                                                 | ▲                                                                          |                                          | ▲                                                                                                                 |                                                                      | ▲                                                       |                                                                                                                    | ▲                                            |                           |
| <b>B/CPR</b>                                                                 | <b>LC</b>                                                                       | <b>LC</b>                                                                  | <b>DX</b>                                | <b>A1</b>                                                                                                         | <b>BLK</b>                                                           | <b>AM</b>                                               | <b>20</b>                                                                                                          | <b>L</b>                                     |                           |
| ST<br>SC<br>MU<br>LC<br>FC<br>E2000                                          | ▼<br><b>ST</b><br><b>SC</b><br><b>MU</b><br><b>LC</b><br><b>FC</b><br><b>E2</b> | Simplex<br>Duplex<br>Quad                                                  | ▼<br><b>SX</b><br><b>DX</b><br><b>QD</b> | Black<br>White                                                                                                    | ▼<br><b>BLK</b><br><b>WHT</b>                                        | 1m<br>2m<br>3m<br>4m<br>5m<br>10m<br>15m<br>20m<br>100m | ▼<br><b>1</b><br><b>2</b><br><b>3</b><br><b>4</b><br><b>5</b><br><b>10</b><br><b>15</b><br><b>20</b><br><b>100</b> |                                              |                           |
| Connector Type A                                                             |                                                                                 | Capacity                                                                   |                                          | Cable Colour                                                                                                      |                                                                      | Length (meters)                                         |                                                                                                                    |                                              |                           |

\*Leave column blank if not required.

| Example Part Number                                               |                      |
|-------------------------------------------------------------------|----------------------|
| Description                                                       | Part Number          |
| BCP CPRI LC-LC Duplex G657A1 Armoured 20m LSZH Patch Cord - Black | B/CPRLCLDXA1BLKAM20L |