

### Fibre Optic Cabling

# Connectix OS2 Singlemode LC/APC - SC/APC Dual Sheathed FTTX Simplex and Duplex Patch Leads

Commonly used widely in applications such as FTTX, gigabit passive optical network (GPON) and wavelength-division multiplexing (WDM), Connectix OS2 singlemode SC/APC -LC/APC patch leads are manufactured using bend insensitive G.657.A1 or G.675.A2 optical fibre, terminated with standards compliant connectors and 100% tested and certified.

The dual sheathed FTTX patch leads provide a consumer end solution, interconnecting an outdoor connection to an indoor distribution point. Manufactured using an outer UV-resistant black low smoke zero halogen sheath (LSZH) for external use which can then be easily stripped back to reveal an inner LSZH white sheath suitable for a short indoor run. Multiple layers of Kevlar strengthening members help ensure the cable remains robust for FTTX installations.

Available in standard low loss or premium and premium low-loss Senko connector formats the SC/APC and LC/APC connectors are a zirconia ceramic ferrule with choice of endface types including standard, step, and cone. These endface types allow for faster polishing, and lower insertion loss and back reflection when terminated within Connectix and Senko production procedures, while ensuring maximum repeatability.

The connector body is precision moulded and available in SC/APC 900um, 2.0mm or 3.0mm long boot formats and LC/APC mini 900um, mini 2mm/3mm and round 2mm/3mm. The housing and boot are made from UL-rated material and Physical Contact (PC) version is also available.

Connectix offers a range of simplex and duplex SC/APC - LC/APC patch leads from stock and a custom length service with fast turnaround service.

### **Connector Features**

- Compliance with Telcordia, ANSI, IEC, TIA/EIA, NTT and JIS specifications
- Low insertion loss & back reflection
- One-piece construction & pull-proof design
- Free-floating ceramic ferrule
- Precision anti-rotation key and corrosion resistant body
- UL-rated plastic housing and boots in a variety of colours
- Telcordia style boots
- Adapters with choice of metal or plastic housing, mount styles & flange options



| Techn          | ical Param                  | neters                     |                |  |           |            |                               |            |                                |        |
|----------------|-----------------------------|----------------------------|----------------|--|-----------|------------|-------------------------------|------------|--------------------------------|--------|
| Cable<br>Count | Outside<br>Diameter<br>(mm) | Buffer<br>Diameter<br>(mm) | Weight<br>(KG) | Minimum Allowable Tensile Strength (N)  Minimum Allowa Crush Load (N/100 |           |            | Minimum Bending Radius ) (MM) |            | Storage<br>Temperature<br>(°C) |        |
|                | ()                          | ()                         |                | Short Term   | Long Term | Short Term | Long Term                     | Short Term | Long Term                      | ( 3)   |
| 1              | 4.5                         | 0.9                        | 15             | 300  | 150       | 300        | 150                           | 20D        | 10D                            | -20+60 |
| 2              | 4.5                         | 0.9                        | 15             | 300  | 150       | 300        | 150                           | 20D        | 10D                            | -20+60 |





## **Fibre Optic Cabling**

# Connectix OS2 Singlemode LC/APC - SC/APC Dual Sheathed FTTX Simplex and Duplex Patch Leads

| Product Series       | IL Against Master (dB) |            | IL Random Mating (dB) |            |  |
|----------------------|------------------------|------------|-----------------------|------------|--|
|                      | Average IL             | Maximum IL | Mean IL               | Maximum IL |  |
| Premium Low Loss APC | 0.07                   | 0.15       | 0.09                  | 0.20       |  |
| Premium APC          | 0.10                   | 0.25       | 0.14                  | 0.30       |  |
| Premium Low Loss SM  | 0.05                   | 0.15       | 0.07                  | 0.15*1     |  |
| Premium SM           | 0.08                   | 0.20       | 0.12                  | 0.25*2     |  |
| Premium MM Connector | 0.10                   | 0.20       | -                     | -          |  |

|                       | Singlemode                          | Multimode                           |  |
|-----------------------|-------------------------------------|-------------------------------------|--|
| Operating Temperature | -40°C to + 75°C                     | -40°C to + 75°C                     |  |
| Durability            | <0.1dB typical change, 500 matings* | <0.1dB typical change, 500 matings* |  |

#### IEC Random mating test IEC 61753-1

- To meet IEC Random Mating Grade A (≤0.07dB mean, ≤0.15dB max for >97% of sample)
   Grade A Spec is not finalized, above is a recommendation
- 2. To meet IEC Random Mating Grade B (≤0.12dB mean, ≤0.25dB max for >97% of sample)
- 3. To meet IEC Random Mating Grade C (≤0.25dB mean, ≤0.50dB max for >97% of sample)

| Ordering Information   |                |  |  |  |
|--|----------------|--|--|--|
| Product Description  | Part Number    |  |  |  |
| Connectix OS2 Singlemode Simplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead                  | 005-070-xxx-01 |  |  |  |
| Connectix OS2 Singlemode Simplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Loss     | 005-071-xxx-01 |  |  |  |
| Connectix OS2 Singlemode Simplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Low Loss | 005-072-xxx-01 |  |  |  |

| Connectix OS2 Singlemode Duplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead           | 005-080-xxx-01          |
|--|-------------------------|
| Connectix OS2 Singlemode Duplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium L | oss 005-080-xxx-01      |
| Connectix OS2 Singlemode Duplex LC/APC – SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium L | ow Loss 005-082-xxx-01C |

[xxx = denotes metre length] 005 = 0.5 metre

010 = 1 metre

100 = 10 metre

[singlemode fibre type confirmed at time of quote/order, i.e G.657.A1 or G.657.A2]

