# Fibre Optic Cabling <br> 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 $900 \mathrm{um}, 2.0 \mathrm{~mm}$ or 3.0 mm long boot formats and LC/APC mini 900 um , mini $2 \mathrm{~mm} / 3 \mathrm{~mm}$ and round $2 \mathrm{~mm} / 3 \mathrm{~mm}$. 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


| Technical Parameters |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cable Count | Outside <br> Diameter (mm) | Buffer Diameter (mm) | Weight (KG) | Minimum Allowable Tensile Strength ( N ) |  | Minimum Allowable Crush Load (N/100mm) |  | Minimum Bending Radius (MM) |  | Storage Temperature $\left({ }^{\circ} \mathrm{C}\right)$ |
|  |  |  |  | Short Term | Long Term | Short Term | Long Term | Short Term | Long Term |  |
| 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 <br> 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 | $-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}$ | $-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}$ |
| Durability | $<0.1 \mathrm{~dB}$ typical change, 500 matings* | $<0.1 \mathrm{~dB}$ typical change, 500 matings* |

IEC Random mating test IEC 61753-1

1. To meet IEC Random Mating Grade A ( $\leq 0.07 \mathrm{~dB}$ mean, $\leq 0.15 \mathrm{~dB}$ max for $>97 \%$ of sample) Grade A Spec is not finalized, above is a recommendation
2. To meet IEC Random Mating Grade B ( $\leq 0.12 \mathrm{~dB}$ mean, $\leq 0.25 \mathrm{~dB}$ max for $>97 \%$ of sample)
3. To meet IEC Random Mating Grade C ( $\leq 0.25 \mathrm{~dB}$ mean, $\leq 0.50 \mathrm{~dB}$ 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 | $005-070-x x x-01$ |
| Connectix OS2 Singlemode Simplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Loss | $005-071-x x x-01$ |
| Connectix OS2 Singlemode Simplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Low Loss | $005-072-x x x-01$ | | Connectix OS2 Singlemode Duplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead | $005-080-x x x-01$ |
| :--- | :---: |
| Connectix OS2 Singlemode Duplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Loss | $005-080-x x x-01$ |
| Connectix OS2 Singlemode Duplex LC/APC - SC/APC LSZH Dual Sheathed FTTX Patch Lead Premium Low Loss | $005-082-x x x-01 C$ |

[ $\mathrm{xxx}=$ 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]

