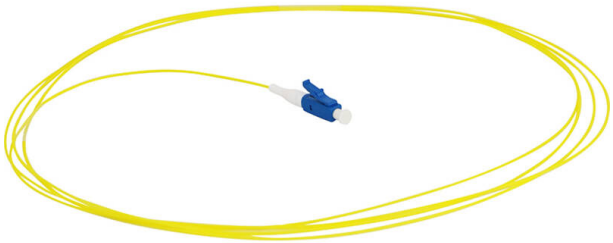
# Excel Enbeam Fibre Pigtail OS2 9/125 LC/UPC Yellow 1 m (12-Pack)

Item Code: 200-650



- G.657.A2 compliant
- Each cable is individually packaged and labelled
- Test Certificate with each cable
- RoHS compliant
- Bend insensitive construction
- CIBSE TM65 Embodied Carbon: 1.248 kg CO2e

## Product Overview

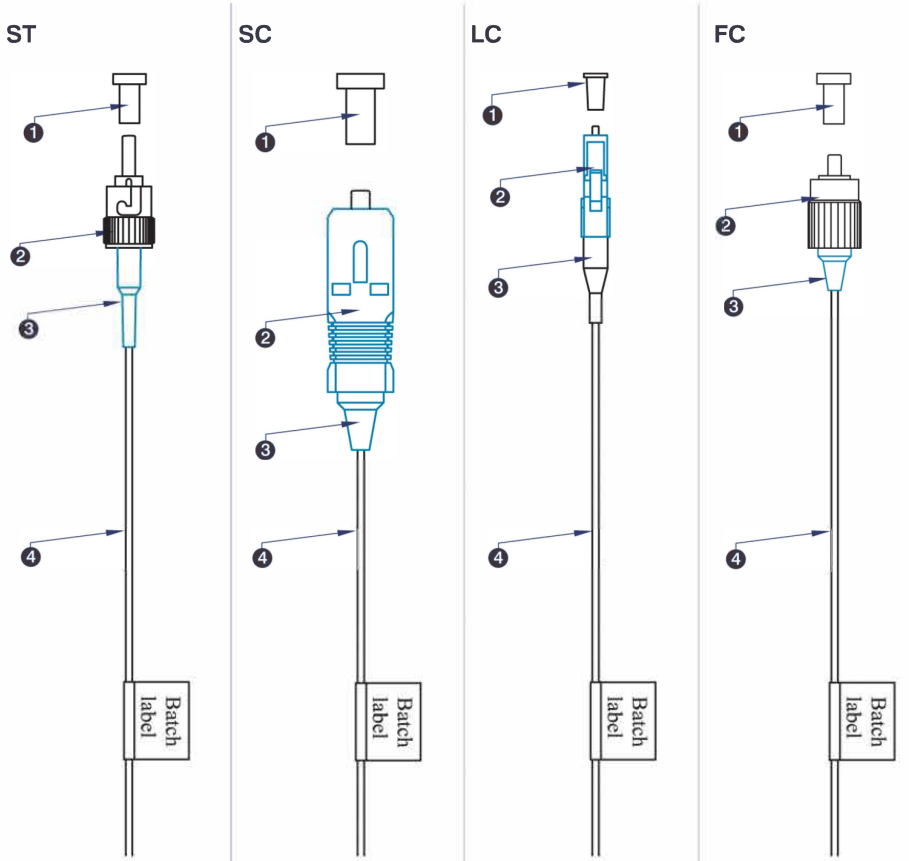
Excel singlemode fibre optic pigtails are manufactured from the highest quality 900 µm optical fibre, terminated with ceramic ferrule connectors of various types. To assist in fast cable preparation and splicing semi tight buffered, easy strip, cable is used as standard. Cable preparation, termination and testing is carried out to strictly managed procedures in an Excel approved, ISO9001 registered manufacturing facility.

Each pigtail has a strain relief boot to prolong and maintain performance levels of the assembly. A short distance from the connector a label containing a unique batch number is fixed to cable for quality and traceability purposes.

## Product Specifications

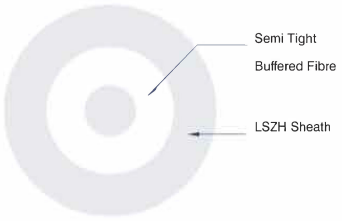
| Feature | Values |
|---|---|
| Fibre type | Single mode |
| Category | OS2 |
| Length | 1 m |
| Type of connector | LC |
| APC-type | no |
| Colour | Yellow |
| Strain relief boot | Push-on |

## Product schematics

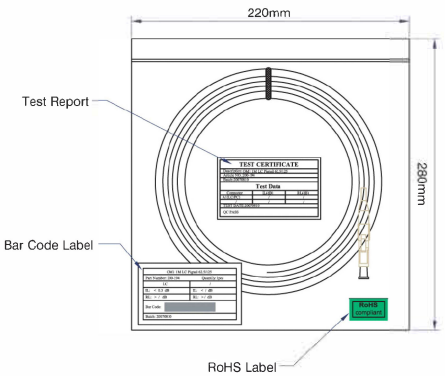



| ST | SC | LC | FC |
|---|---|---|---|
| ❶ ST Dust cover | ❶ SC Dust cover | ❶ LC Dust cover | ❶ FC Dust cover |
| ❷ ST connector | ❷ SC connector | ❷ LC connector | ❷ FC connector |
| ❸ ST Strain relief boot | ❸ SC Strain relief boot | ❸ LC Strain relief boot | ❸ FC Strain relief boot |
| ❹ Easy Strip LSOH cable | ❹ Easy Strip LSOH cable | ❹ Easy Strip LSOH cable | ❹ Easy Strip LSOH cable |

### Cable Profile




### Packaging



## Fibre specifications

| Features | Values |
|---|---|
| Mode Field diameter at 1310 nm | 8.4-9.2 µm |
| Mode Field diameter at 1550 nm | 9.3-10.3 µm |
| Cladding diameter | 125.0±0.7 µm |
| Cladding Non-circularity | ≤ 0.7 % |
| Primary Coating diameter | 235-245 µm |
| Coating-Cladding Concentricity Error | ≤ 12 µm |
| Coating Non-circularity | ≤ 6.0 % |
| Core-Cladding Concentricity Error | ≤ 0.5 µm |
| Max. attenuation at 1310 nm | ≤ 0.35 dB/km |
| Max. attenuation at 1383 nm | ≤ 0.35 dB/km |
| Max. attenuation at 1460 nm | ≤ 0.25 dB/km |
| Max. attenuation at 1490 nm | ≤ 0.23 dB/km |
| Max attenuation at 1550 nm | ≤ 0.21 dB/km |
| Max attenuation at 1625 nm | ≤ 0.23 dB/km |
| PMD (typical value) | 0.04 ps/km |
| Cut-off wavelength | 1260 nm |
| Zero dispersion wavelength | 1300-1324 nm |
| Zero dispersion slope | ≤0.092 ps/nm2.km |
| Refractive Index at 1310 nm | 1.466 |
| Refractive Index at 1550 nm | 1.467 |
| Macro-Bend Loss - 10 turns, 15 mm radius, 1625 nm | ≤ 0.0 3dB |
| Macro-Bend Loss - 10 turns, 15 mm radius, 1550 nm | ≤ 0.1 dB |
| Macro-Bend Loss - 1 turn, 10 mm radius, 1550 nm | ≤ 0.1 dB |
| Macro-Bend Loss - 1 turn, 10 mm radius, 1625 nm | ≤ 0.2 dB |
| Macro-Bend Loss - 1 turn, 7.5 mm radius, 1550 nm | ≤ 0.5 dB |
| Macro-Bend Loss - 1 turn, 7.5 mm radius, 1625 nm | ≤ 1.0 dB |

## Cable specifications

| Features | Values | ST Assemblies | SC Assemblies | LC Assemblies |
|---|---|---|---|---|
| Construction | Semi-Tight Buffered | | | |
| No. of Fibres | 1 | | | |
| Diameter | 900 micron | | | |
| Temperature range | -20C to +70C | | | |
| Connector Material | | Nickel plated Brass | Composite | Composite |
| Minimum bend radius | 10 x cable diameter | | | |
| Connector Ferrule | | 2.5 mm Zirconium ceramic | 2.5 mm Zirconium ceramic | 1.25 mm Zirconium ceramic |
| Connector Insertion Loss | Max. 0.3 dB | | | |
| Connector Return Loss (Multimode) | Max. -30 dB | | | |
| Ferrule End Face (Singlemode UPC) | Max. -50 dB | | | |
| Ferrule End Face (Singlemode APC) | Max. -60 dB | | | |

## Standards

| Applicable standard | Detail |
|---|---|
| IEC 60793-1-1:2022 | Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance |
| IEC 60793-2:2015 | Optical fibres - Part 2: Product specifications - General |
| IEC 60793-2-10:2017 | Sectional specification for A1 multimode fibres |
| IEC 60793-1-20:2014 | Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry |
| IEC 60793-1-21:2001 | Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry |
| IEC 60793-1-22:2001 | Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement |
| IEC 60793-1-30:2010 | Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test |

| | |
|---|---|
| IEC 60793-1-31:2010 | Optical fibres - Part 1-31: Measurement methods and test procedures - Tensile Strength |
| ITU-T G652.1:2016 | Characteristics of a 9/125 µm multimode graded index optical fibre cable for the optical access network |
| EN 50173-1:2018 | Information technology. Generic cabling systems - General requirements |
| EN 50173-2:2007 + A1:2010 | Information technology. Generic cabling systems - Office premises |
| IEC 61754-1:2013 | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance |
| IEC 61754-2:1996 | Fibre optic connector interfaces - Part 2: Type BFOC/2,5 connector family |
| IEC 61754-4:2013 | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family |
| IEC 61754-4-100:2015 | Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4-100: Type SC connector family - Simplified receptacle SC-PC connector interfaces |
| RoHS-II/-III (2011/65/EU & 2015/863): 2023 | Our products, demonstrate full adherence to the regulatory stipulations of the EU Directive 2011/65/EU (RoHS-II) and its corresponding delegated directive 2015/863 (RoHS-III). |
| ANSI/TIA 568-3.D | Optical Fiber Cabling and Components Standard |
| ISO/IEC 11801-1:2017 | Information technology - Generic cabling for customer premises: Part 1 General Requirements |
| WFD: 2023 | Compliant to Waste Framework Directive |
| SCIP: 2023 | Compliant - Does Not Contain Substances of Concern In articles as such or in complex objects (Products) |
| POPs (EU) No 2019/1021 | EU Regulation for the restriction of Persistent Organic Pollutants. |

## Part Number Table

| Part Number | Description |
|---|---|
| 200-648 | Excel Enbeam Fibre Pigtail OS2 9/125 ST/UPC Yellow 1 m (12-Pack) |
| 200-649 | Excel Enbeam Fibre Pigtail OS2 9/125 SC/UPC Yellow 1 m (12-Pack) |
| 200-650 | Excel Enbeam Fibre Pigtail OS2 9/125 LC/UPC Yellow 1 m (12-Pack) |
| 200-653 | Excel Enbeam Fibre Pigtail OS2 9/125 SC/APC Clear White 1 m (12-Pack) |

| | |
|---|---|
| 200-654 | Excel Enbeam Fibre Pigtail OS2 9/125 FC/UPC Clear White 1 m (12-Pack) |
| 200-655 | Excel Enbeam Fibre Pigtail OS2 9/125 LC/APC Yellow 1m (12-Pack) |