

Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC  
Aqua 1 m (12-Pack)

Item Code: 200-645



- ✕ Semi Loose Buffered
- ✕ Choice of connectors & lengths
- ✕ Each cable is individually packaged and labelled
- ✕ Test Certificate with each cable
- ✕ RoHS Compliant
- ✕ Bend insensitive construction
- ✕ CIBSE TM65 Embodied Carbon: 0.133 kg CO2e

Product Overview

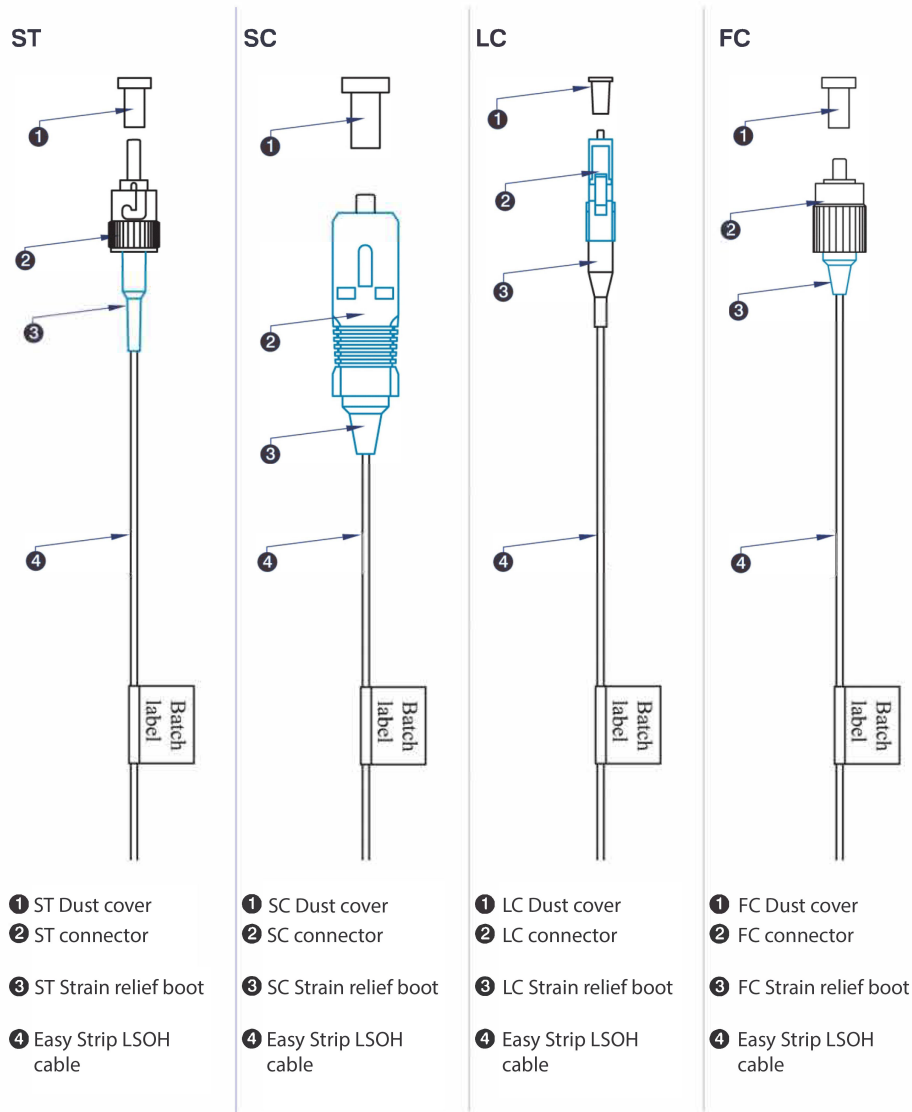
Excel multimode fibre optic pigtails are manufactured from the highest quality 900 micron optical fibre, terminated with ceramic ferrule connectors of various types. To assist in fast cable preparation and splicing semi tight buffered, easy strip, cable is used as standard. Cable preparation, termination 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.

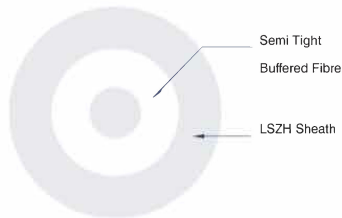
Product Specifications

| Feature            | Values            |
|--------------------|-------------------|
| Fibre type         | Multi mode 50/125 |
| Category           | OM3               |
| Length             | 1 m               |
| Type of connector  | LC                |
| APC-type           | no                |
| Colour             | Aqua              |
| Strain relief boot | Push-on           |

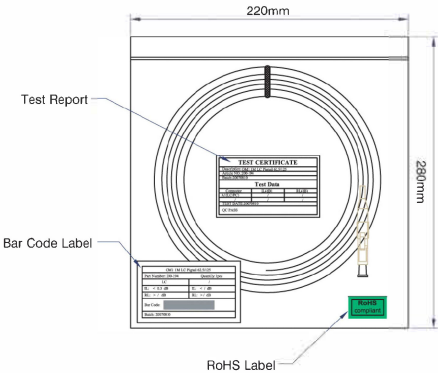
Product schematics



Cable Profile



Packaging



# Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)

Item Code: 200-645



## Fibre specifications

| Features                             | OM1            | OM2            | OM3            | OM4            | OM5            |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Core diameter                        | 62.5 ± 2.5µm   | 50 ± 2.5µm     | 50 ± 2.5µm     | 50 ± 2.5µm     | 50 ± 2.5µm     |
| Core Non-circularity                 | ≤5%            | ≤5%            | ≤5%            | ≤5%            | ≤5%            |
| Core-Cladding Concentricity Error    | ≤1.5µm         | ≤1.5µm         | ≤1.0µm         | ≤1.0µm         | ≤1.0µm         |
| Cladding diameter                    | 125 ± 1.0µm    | 125 ± 1.0µm    | 125 ± 1.0µm    | 125 ± 1.0µm    | 125 ± 0.8µm    |
| Cladding Non-circularity             | ≤1.0%          | ≤1.0%          | ≤1.0%          | ≤1.0%          | ≤0.6%          |
| Primary Coating diameter             | 245 ± 7µm      | 245 ± 7µm      | 245 ± 7µm      | 245 ± 7µm      | 245 ± 7µm      |
| Coating-Cladding Concentricity Error | ≤10.0µm        | ≤10.0µm        | ≤10.0µm        | ≤10.0µm        | ≤10.0µm        |
| Coating Non-circularity              | ≤6.0%          | ≤6.0%          | ≤6.0%          | ≤6.0%          | ≤6.0%          |
| Secondary coating diameter           | 900 µm nominal | 900 µm nominal | 900 µm nominal | 900 µm nominal | 900 µm nominal |
| Max. attenuation at 850nm            | 2.7dB/km       | 2.3dB/km       | 2.4dB/km       | 2.4dB/km       | 2.4dB/km       |
| Max. attenuation at 953nm            |                |                |                |                | 1.7dB/km       |
| Max attenuation at 1300nm            | 0.6dB/km       | 0.6dB/km       | 0.6dB/km       | 0.6dB/km       | 0.6dB/km       |
| Refractive Index at 850nm            | 1.496          | 1.482          | 1.482          | 1.482          | 1.482          |
| Refractive Index at 1300nm           | 1.491          | 1.477          | 1.477          | 1.477          | 1.477          |
| Bandwidth at 850nm                   | 200 MHz.km     | 500 MHz.km     | ≥1500 MHz.km   | ≥3500 MHz.km   | ≥3500 MHz.km   |
| Bandwidth at 953nm                   |                |                |                |                | ≥1850 MHz.km   |

# Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)

Item Code: 200-645



| Bandwidth at 1300nm                                  | 500 MHz.km   | 500 MHz.km   | ≥500 MHz.km  | ≥500 MHz.km  | ≥500 MHz.km   |
|--|--------------|--------------|--------------|--------------|---------------|
| Effective Modal Bandwidth at 850nm                   |              |              | ≥2000 MHz/km | ≥4700 MHz/km | ≥4700 MHz/km  |
| Effective Modal Bandwidth at 953nm                   |              |              |              |              | ≥2470 MHz/km  |
| Numerical Aperture                                   | 0.275 ±0.015 | 0.200 ±0.015 | 0.200 ±0.015 | 0.200 ±0.015 | 0.200 ± 0.015 |
| Zero Dispersion Wavelength                           | 1320-1365nm  | 1295-1340nm  | 1295-1340nm  | 1295-1340nm  | 1295-1340nm   |
| Macrobending Loss - 100 turns, 37.5mm Radius, 850nm  | ≤0.50dB      | ≤0.10dB      | ≤0.50dB      | ≤0.50dB      | ≤0.10dB       |
| Macrobending Loss - 100 turns, 37.5mm Radius, 1300nm | ≤0.50dB      | ≤0.30dB      | ≤0.50dB      | ≤0.50dB      | ≤0.30dB       |
| Macrobending Loss - 2 turns, 7.5mm Radius, 850nm     |              | ≤0.2dB       | ≤1.0dB       | ≤1.0dB       | ≤0.2dB        |
| Macrobending Loss - 2 turns, 7.5mm Radius, 1300nm    |              | ≤0.5dB       | ≤1.0dB       | ≤1.0dB       | ≤0.5dB        |

# Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)

Item Code: 200-645



## 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    |

# Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)

Item Code: 200-645



|   |   |
|---|---|
| IEC 60793-1-31:2010                       | Optical fibres - Part 1-31: Measurement methods and test procedures - Tensile Strength  |
| ITU-T G.651.1:2018                        | Characteristics of a 50/125 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   |
|-------------|---|
| 200-637     | Excel Enbeam Fibre Pigtail OM1 62.5/125 SC/UPC Grey 1 m (12-Pack) |
| 200-638     | Excel Enbeam Fibre Pigtail OM1 62.5/125 ST/UPC Grey 1 m (12-Pack) |
| 200-639     | Excel Enbeam Fibre Pigtail OM1 62.5/125 LC/UPC Grey 1 m (12-Pack) |
| 200-640     | Excel Enbeam Fibre Pigtail OM2 50/125 ST/UPC White 1 m (12-Pack)  |

# Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)

Item Code: 200-645



|         |   |
|---------|---|
| 200-641 | Excel Enbeam Fibre Pigtail OM2 50/125 SC/UPC White 1 m (12-Pack)  |
| 200-642 | Excel Enbeam Fibre Pigtail OM2 50/125 LC/UPC White 1 m (12-Pack)  |
| 200-643 | Excel Enbeam Fibre Pigtail OM3 50/125 ST/UPC Aqua 1 m (12-Pack)   |
| 200-644 | Excel Enbeam Fibre Pigtail OM3 50/125 SC/UPC Aqua 1 m (12-Pack)   |
| 200-645 | Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Aqua 1 m (12-Pack)   |
| 200-646 | Excel Enbeam Fibre Pigtail OM4 50/125 SC/UPC Violet 1 m (12-Pack) |
| 200-647 | Excel Enbeam Fibre Pigtail OM4 50/125 LC/UPC Violet 1 m (12-Pack) |

Excel is a world class premium performing end to end infrastructure solution designed,  
Manufactured, supported and delivered without compromise.

Contact us at [sales@excel-networking.com](mailto:sales@excel-networking.com)



E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.