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- X Colour-coded fibres to TIA standard
- X Tight buffered construction
- X Easy to manage packaging
- X Rend insensitive construction
- X Test Certificate with each cable
- X RoHS Compliant

Product Overview

Excel multimode Tight Buffered fibre optic pigtails are manufactured from the highest quality 900 micron optical fibre, terminated with ceramic ferrule connectors of various types.

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 | ОМЗ |
| Length | 2 m |
| Type of connector | LC |
| APC-type | no |
| Colour | Multi Coloured (TIA 598) |
| Strain relief boot | Push-on |

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Fibre specifications

| Features | OM1 | OM2 | ОМЗ | OM4 | OM5 |
|--|----------------------|--------------------|-------------------|-------------------|-------------------|
| Core diameter | $62.5 \pm 2.5 \mu m$ | $50 \pm 2.5 \mu m$ | 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 |

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| 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 |
| Nµmerical 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 |

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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 | | 2.5mm Zirconium ceramic | 2.5mm Zirconium ceramic | 1.25mm Zirconium ceramic |
| Connector Insertion Loss | Max. 0.3dB | | | |
| Connector Return Loss (Multimode) | Max30dB | | | |
| Ferrule End Face (Singlemode UPC) | Max50dB | | | |
| Ferrule End Face (Singlemode APC) | Max60dB | | | |

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 |
| | |

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| 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 |

Part Number Table

| Part Number | Description |
|-------------|--|
| 200-458 | Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC Tight Buffered 12-Colour Pack (TIA 598) 2 m |
| 200-546 | Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC 12-Colour Pack (TIA 598) 1 m |
| 200-547 | Excel Enbeam Fibre Pigtail OM4 50/125 LC/UPC 12-Colour Pack (TIA 598) 1 m |

excel without compromise.

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| 200-578 | Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC 12-Colour Pack (TIA 598) 0.5 m |
|---------|---|
| 200-603 | Excel Enbeam Fibre Pigtail OM3 50/125 LC/UPC 12-Colour Pack (TIA 598) 2 m |
| 200-604 | Excel Enbeam Fibre Pigtail OM4 50/125 LC/UPC 12-Colour Pack (TIA 598) 2 m |
| 204-322 | Excel Enbeam Fibre Pigtail OM4 50/125 LC/UPC 12-Colour Pack (TIA 598) 0.5 m |

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

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