# Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 0.5 m

Item Code: 202-196

- 100% optically tested
- Test certificate included
- Low loss connectors
- Zirconia ceramic UPC ferrules
- Polarity changeable (duplex connectors)
- 25 year system warranty
- CIBSE TM65 Embodied Carbon: 0.192 kg CO2e

## Product Overview

Excel OM1 62.5/125 µm duplex patch leads are manufactured from the highest quality 900 µm buffer/jacket optical fibre, terminated with ceramic ferrule connectors.

Each cable has strain relief boots to prolong and maintain performance levels of the assembly, transmit and receive 'legs' of each duplex cable are identified by means of ring type cable marker fixed to each end the assembly. A short distance from these identification rings heat shrink is applied to maintain an easy to manage bonded two fibre cable, finally a label containing a unique batch number is fixed to the centre of cable for quality and traceability purposes.

## Product Specifications

| Feature | Values |
|---|---|
| Fibre type | Multi mode 62.5/125 |
| Category | OM1 |
| Number of Cores | 2 |
| Outer diameter sheath single fibre | 3 mm |
| Cable type | Duplex |
| Length | 0.5 m |
| Type of connector connection 1 | ST |

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|---|---|
| Type of connector connection 2 | ST |
| Outer sheath colour | Grey |
| Strain relief boot | Push-on |
| Flame retardant according to IEC 60332-1-2 | yes |
| Low smoke (acc. IEC 61034-2) | yes |

## Cable specifications

| Features | Values | ST Assemblies | SC Assemblies | LC Assemblies |
|---|---|---|---|---|
| Cable Construction | Duplex zip-cord | | | |
| No. of Fibres | 2 | | | |
| Cable Dimensions | | 2.8 x 5.7mm | 2.8 x 5.7mm | 2.0 x 4.0mm |
| Colour | Grey or Orange | | | |
| Strength members | Aramid Yarn | | | |
| Temperature range | -20C to +70C | | | |
| Connector Material | | Nickel plated Brass | Composite | Composite |
| Minimum bend radius (loaded) | 10 x cable diameter | | | |
| Connector Ferrule | | 2.5mm Zirconium ceramic | 2.5mm Zirconium ceramic | 1.25mm Zirconium ceramic |
| Ferrule End Face | PC Polish | | | |
| Connector Insertion Loss | Max. 0.3dB | | | |

## Fibre specifications

| Features | Values |
|---|---|
| Core diameter | 62.5 ± 2.5µm |
| Core Non-circularity | ≤5% |
| Core-Cladding Concentricity Error | ≤1.5µm |
| Cladding diameter | 125 ± 1.0µm |
| Cladding Non-circularity | ≤1.0% |
| Primary Coating diameter | 245 ± 7µm |
| Coating-Cladding Concentricity Error | ≤10.0µm |

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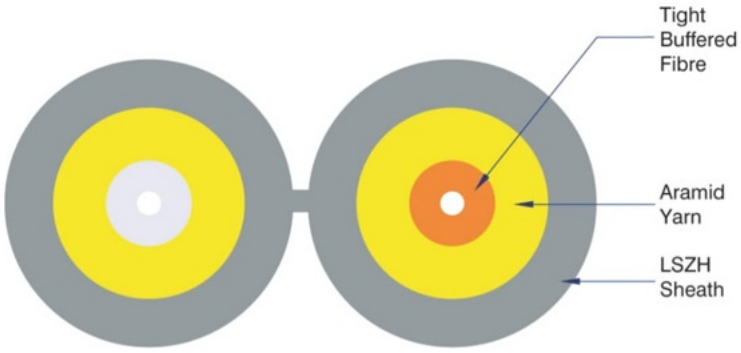
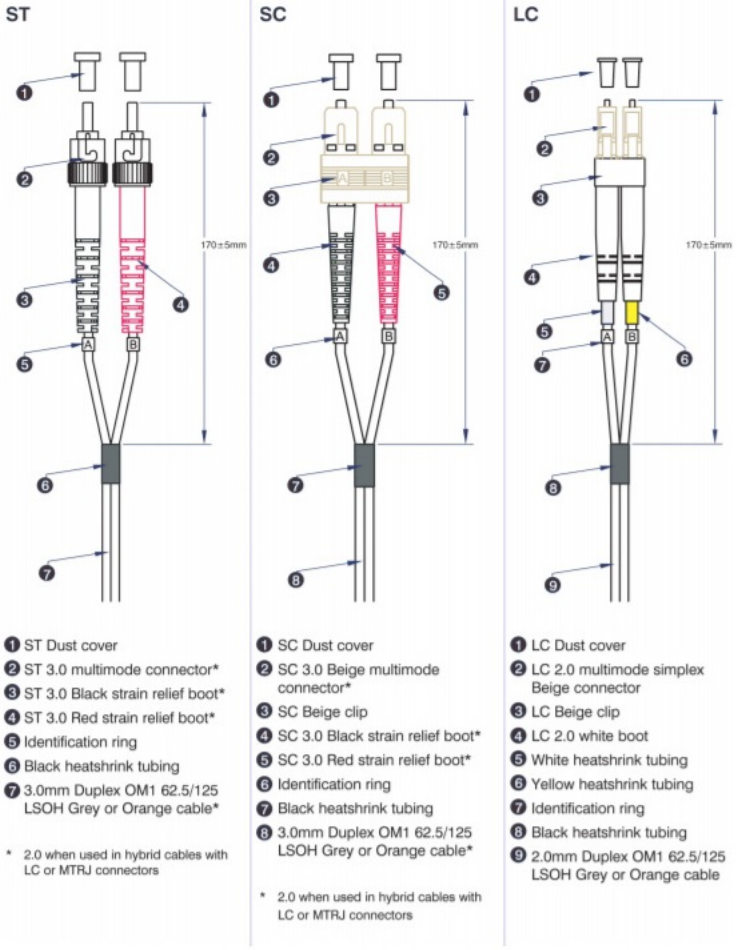
|---|---|
| Coating Non-circularity | ≤6.0% |
| Secondary coating diameter | 900 µm nominal |
| Max. attenuation at 850nm | 2.7dB/km |
| Max attenuation at 1300nm | 0.6dB/km |
| Refractive Index at 850nm | 1.496 |
| Refractive Index at 1300nm | 1.491 |
| Bandwidth at 850nm | 200 MHz.km |
| Bandwidth at 1300nm | 500 MHz.km |
| Nµmerical Aperture | 0.275 ±0.015 |
| Zero Dispersion Wavelength | 1320-1365nm |
| Macrobending Loss - 100 turns, 37.5mm Radius, 850nm | ≤0.50dB |
| Macrobending Loss - 100 turns, 37.5mm Radius, 1300nm | ≤0.50dB |
| Coating Strip Force (typical) | 1.5N |
| Coating Strip Force (peak) | 1.3 - 8.9N |

## Cross-section diagram




## Product Schematics




**ST**

1. ST Dust cover
2. ST 3.0 multimode connector*
3. ST 3.0 Black strain relief boot*
4. ST 3.0 Red strain relief boot*
5. Identification ring
6. Black heatshrink tubing
7. 3.0mm Duplex OM1 62.5/125 LSOH Grey or Orange cable*

* 2.0 when used in hybrid cables with LC or MTRJ connectors

**SC**

1. SC Dust cover
2. SC 3.0 Beige multimode connector*
3. SC Beige clip
4. SC 3.0 Black strain relief boot*
5. SC 3.0 Red strain relief boot*
6. Identification ring
7. Black heatshrink tubing
8. 3.0mm Duplex OM1 62.5/125 LSOH Grey or Orange cable*

* 2.0 when used in hybrid cables with LC or MTRJ connectors

**LC**

1. LC Dust cover
2. LC 2.0 multimode simplex Beige connector
3. LC Beige clip
4. LC 2.0 white boot
5. White heatshrink tubing
6. Yellow heatshrink tubing
7. Identification ring
8. Black heatshrink tubing
9. 2.0mm Duplex OM1 62.5/125 LSOH Grey or Orange cable

## Standards

| Applicable standard | Detail |
|---|---|
| BS EN 60332-1-2:2004+A11:2016 | Tests on electric and optical fibre cables under fire conditions - Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame |
| 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 G.651.1 | 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). |

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|---|---|
| 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 |
|---|---|
| 200-181 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-182 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-183 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 3 m |
| 200-184 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-185 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-186 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-187 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 3 m |
| 200-188 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-189 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-190 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-191 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 3 m |
| 200-192 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-290 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-300 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-310 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 3 m |

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| 200-320 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-324 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 10 m |
| 200-326 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 15 m |
| 200-329 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 20 m |
| 200-500 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-510 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-520 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 3 m |
| 200-524 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 10 m |
| 200-525 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 15 m |
| 200-526 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 20 m |
| 200-530 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-600 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 1 m |
| 200-610 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 2 m |
| 200-620 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 3 m |
| 200-630 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 5 m |
| 200-634 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 10 m |
| 200-635 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 15 m |
| 200-636 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-SC Multimode 62.5/125 DX LS0H Grey 20 m |
| 202-000 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 10 m |
| 202-001 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 15 m |

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| 202-002 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 20 m |
| 202-003 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 10 m |
| 202-004 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 15 m |
| 202-006 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 10 m |
| 202-007 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 15 m |
| 202-008 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 20 m |
| 202-170 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-LC Multimode 62.5/125 DX LS0H Grey 0.5 m |
| 202-177 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 0.5 m |
| 202-180 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-SC Multimode 62.5/125 DX LS0H Grey 30 m |
| 202-183 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 0.5 m |
| 202-186 | Excel Enbeam OM1 Fibre Optic Patch Lead LC-ST Multimode 62.5/125 DX LS0H Grey 30 m |
| 202-190 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 0.5 m |
| 202-193 | Excel Enbeam OM1 Fibre Optic Patch Lead SC-SC Multimode 62.5/125 DX LS0H Grey 30 m |
| 202-196 | Excel Enbeam OM1 Fibre Optic Patch Lead ST-ST Multimode 62.5/125 DX LS0H Grey 0.5 m |