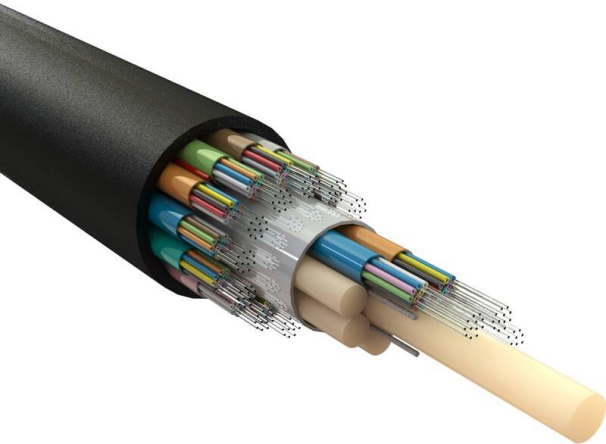


Excel Enbeam OS2 Micro Blown G.657.A1 200 µm
Fibre Cable Loose Tube 144 Core HDPE Fca Black



Item Code: 328-144



- ✕ G.657.A1 Bend insensitive
- ✕ High core count
- ✕ Small light weight design
- ✕ Recommended internal duct size - 10 mm
- ✕ Euroclass: Fca
- ✕ High Density Polyethylene (HDPE) outer jacket

Product Overview

Enbeam OS2 micro blown SM G.657.A1 200 µm fibre cable loose tube 144 core 9/125 HDPE Fca black, part of a huge range of OS2 fibre optic cables fully stocked at Mayflex. The Enbeam Micro Blown 200 µm fibre has been designed for blowing into the Enbeam Micro-duct system.

The cable is constructed from multiple gel filled loose tubes around a central strength member, overlaid with water blocking yarn and covered with a High Density Polyethylene (HDPE) outer jacket.

The small diameter 5.6 mm to 9.6 mm allows high core count fibres to be blown into the access network down micro-duct with an inner diameter as small as 10 mm to 14 mm.

Please note this cable is used for blown systems only and should not be manually pulled into ducts.

Product Specifications

| Feature | Values |
|---------------------------|-------------------|
| Number of Cores | 144 |
| Type of tube | Loose tube |
| Number of fibres per tube | 24 |
| Fibre type | Single mode 9/125 |
| Category | OS2 |
| Outer sheath material | HDPE |
| Outer sheath colour | Black |

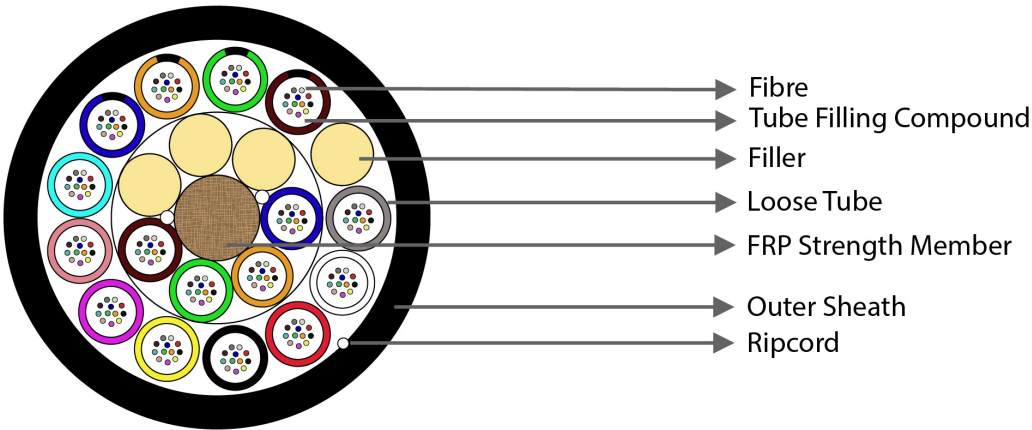
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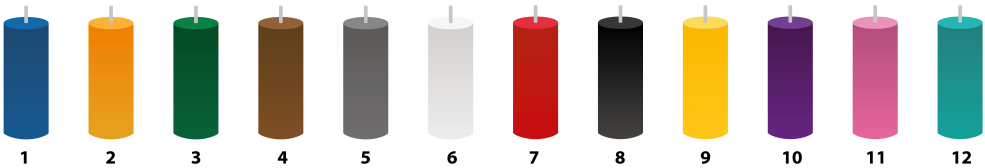
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| | |
|--|--------|
| Reaction-to-fire class according to EN 13501-6 | Fca |
| Outer diameter approx. | 5.6 mm |
| Blown system | yes |

Product drawing



Colour coding (as per TIA-598-C)



For fibre core counts above 12 the colour sequence is repeated with the addition of a mark every 70mm for cores 13-24 and two marks for 25-36 and so on.

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Cable specifications

| Features | | Values |
|-------------------------------|------------|----------------|
| Weight (kg/km) | 144-core | 46 (nominal) |
| | 192-core | 51 (nominal) |
| | 288-core | 65 (nominal) |
| | 432-core | 79 (nominal) |
| Loose tube material | | PBT |
| Type of filling compound | | Jelly |
| Number of loose tubes/fillers | 144-core | 12/0 |
| | 192-core | 16/4 |
| | 288-core | 24/0 |
| | 432-core | 18/0 |
| Central strength member type | | FRP |
| Tensile performance (N) | long term | 0.15G |
| | short term | 0.5G |
| Crush Resistance | long term | 150 N/100mm |
| | short term | 450 N/100mm |
| Minimum Bending Radius | short term | 10D |
| | long term | 20D |
| Temperature | operating | -20°C to +70°C |

Fibre specifications

| Features | | Values |
|--|-----------------|---------------|
| Attenuation | @1310nm | ≤0.4 dB/km |
| | @1383nm | ≤0.4 dB/km |
| | @1550nm | ≤0.30 dB/km |
| | @1625nm | ≤0.30 dB/km |
| Chromatic Dispersion Coefficient | 1288nm - 1339nm | ≤3.5ps/km·nm |
| | 1271nm - 1360nm | ≤5.3ps/km·nm |
| | @1550nm | ≤18.0ps/km·nm |
| Zero Dispersion Wavelength, λ ₀ | | 1300-1324nm |

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| | | |
|--|-----------------------------------|---|
| Zero Dispersion Slope | | $\leq 0.092 \text{ ps}/(\text{km}\cdot\text{nm}^2)$ |
| Cut-off Wavelength, λ_{cc} | | $\leq 1260\text{nm}$ |
| Polarization mode dispersion | Individual fibre | $\leq 0.2\text{ps}/\sqrt{\text{Km}}$ |
| | Design link value (M=20, Q=0.01%) | $\leq 0.1\text{ps}/\sqrt{\text{Km}}$ |
| Macro Bending Loss | 10 turns, 15mm radius | $\leq 0.25\text{dB}@1550\text{nm}$ |
| | | $\leq 1.0\text{dB}@1625\text{nm}$ |
| | 1 turns, 10mm radius | $\leq 0.75\text{dB}@1550\text{nm}$ |
| | | $\leq 1.5\text{dB}@1625\text{nm}$ |
| Cladding Diameter | | $125.0\pm 1.0\mu\text{m}$ |
| Cladding Non-circularity | | $\leq 1.0\%$ |
| Primary Coating Diameter | | $200\pm 15\mu\text{m}$ |
| Core Concentricity Error | | $\leq 0.6\mu\text{m}$ |
| Coating – Cladding Concentricity Error | | $\leq 12\mu\text{m}$ |
| Fibre Curl Radius | | $\geq 4\text{m}$ |
| Mode Field Diameter | @1310nm | $8.6-9.5\pm 0.4\mu\text{m}$ |
| Point discontinuity | | $\leq 0.05\text{dB}$ |
| Proof Stress Level | | $\geq 100\text{kpsi}$ (0.69 GPa) |
| Coating strip force | Peak | 1.3-8.9N |

Standards

| Applicable standard | Subject |
|---------------------|---|
| IEC 60793-1-1:2022 | Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance |
| 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 |
| ITU G.652.D | Characteristics of a single-mode optical fibre and cable |
| ITU-T G.657 | Characteristics of a bending-loss insensitive single-mode |

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optical fibre and cable

| | |
|--|---|
| EN 50173-1:2018 | Information technology. Generic cabling systems - General requirements |
| EN 50575: 2014 + A1: 2016 | Power, control and communication cables — Cables for general applications in construction works subject to reaction to fire requirements |
| EN 50399:2011+A1:2016 | Common test methods for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results |
| ISO/IEC 11801-1:2017 | Information technology - Generic cabling for customer premises: Part 1 General Requirements |
| ANSI/TIA 568-3.D | Optical Fiber Cabling and Components Standard |
| ANSI/TIA/EIA 598-D | Optical Fibre Cable Colour Coding |
| 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). |
| 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 |
|-------------|---|
| 328-144 | Excel Enbeam OS2 Micro Blown G.657.A1 200 µm Fibre Cable Loose Tube 144 Core HDPE Fca Black |
| 328-288 | Excel Enbeam OS2 Micro Blown G.657.A1 200 µm Fibre Cable Loose Tube 288 Core HDPE Fca Black |
| 328-432 | Excel Enbeam OS2 Micro Blown G.657.A1 200 µm Fibre Cable Loose Tube 432 Core HDPE Fca Black |

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



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