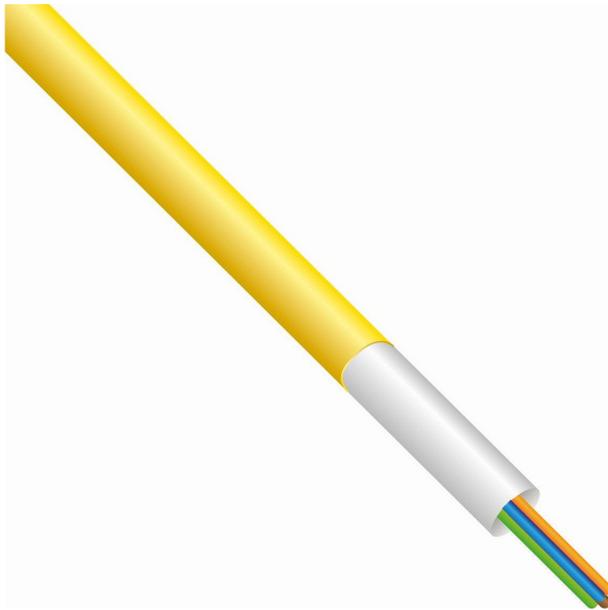


# Excel Enbeam OS2 Singlemode G.657.A1 Blown Fibre EPFU 4 Fibre 9/125 Yellow

Item Code: 208-812

**excel**  
without compromise.



✕ G.657.A1 bend insensitive

✕ Available in 4, 8 & 12-fibre bundles

✕ TIA-598-C colour coded

✕ Gel free dielectric design

✕ Coated for improving blowing performance

✕ 25 year system warranty

## Product Overview

Enbeam OS2 singlemode G.657.A1 blown fibre EPFU 4 fibre 9/125 yellow, part of a huge range of OS2 fibre optic cables fully stocked at Mayflex.

Enbeam Enhanced Performance Fibre Units (EPFU) are designed specifically for blown-fibre applications and are optimised for installation within our range of blown-fibre tubes.

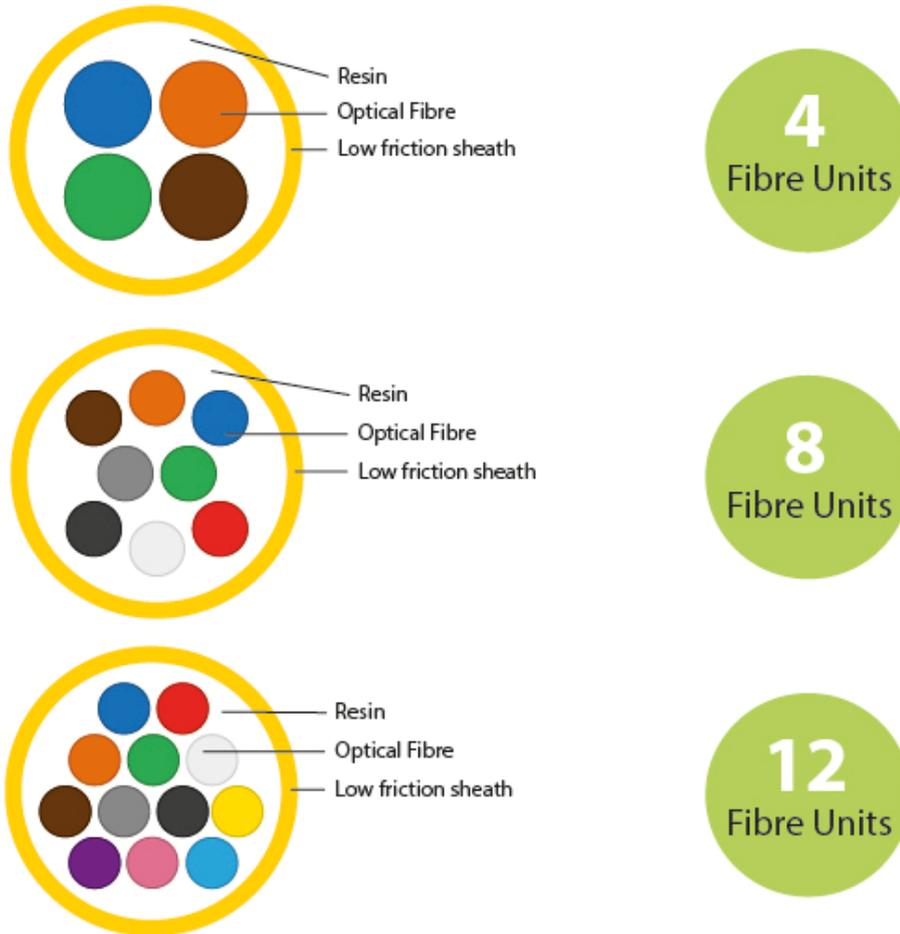
The fibres are contained within a soft acrylate layer which cushions the fibres. This layer is coated with a hard layer for strength and finally a low-friction coating to ensure low drag and maximise blowing distances within the tubes.

The acrylate coatings are easy to remove to expose the 250-micron primary-coated fibres for quick splicing. The fibres are colour-coded according to TIA-598-C.

## Product Specifications

| Feature                | Values            |
|------------------------|-------------------|
| Number of Cores        | 4                 |
| Fibre type             | Single mode 9/125 |
| Category               | OS2               |
| Outer sheath colour    | Yellow            |
| Outer diameter approx. | 1.15 mm           |
| Blown system           | yes               |

**Product drawing**



**Cable specifications**

| Features                |            | Values    |
|-------------------------|------------|-----------|
| Weight (kg/km)          | 4 Fibres   | 1.0 ± 0.3 |
|                         | 8 Fibres   | 1.8 ± 0.3 |
|                         | 12 Fibres  | 3.0 ± 0.3 |
| Tensile performance (N) | Short term | 1*G       |
|                         | Long term  | 0.3*G     |
| Crush (N/100 mm)        | Short term | 100       |
|                         | Long term  | 50        |

|                          |                            |                     |
|--------------------------|----------------------------|---------------------|
| Blowing test equipment   |                            | PLUMETTAZ: UltimaZ™ |
| Standard duct            |                            | 5.0/3.5 mm          |
| Pressure                 |                            | 12 bar              |
| Typical blowing distance | 4 Fibres                   | 1000 m              |
|                          | 8 Fibres                   | 1000 m              |
|                          | 12 Fibres                  | 800 m               |
| Typical blowing time     | 4 Fibres                   | 35 min              |
|                          | 8 Fibres                   | 35 min              |
|                          | 12 Fibres                  | 30 min              |
| Temperature              | Transportation and storage | -40°C to +70°C      |
|                          | Installation               | -5°C to +50°C       |
|                          | Operation                  | -20°C to +70°C      |

## Fibre specifications

| Features                                 |                        | Values                           |
|--|------------------------|----------------------------------|
| Attenuation (before cabling)             | @ 1310 nm              | ≤ 0.35 dB/km                     |
|  | @ 1550 nm              | ≤ 0.21 dB/km                     |
| Attenuation (after cabling)              | @ 1310 nm              | ≤ 0.36 dB/km                     |
|  | @ 1550 nm              | ≤ 0.25 dB/km                     |
| Attenuation change over wavelength range | 1285 nm - 1330 nm      | ≤ 0.38 dB/km                     |
|  | 1525 nm - 1575 nm      | ≤ 0.25 dB/km                     |
|  | 1460 nm - 1625 nm      | ≤ 0.28 dB/km                     |
| Chromatic Dispersion Coefficient         | 1288 nm - 1339 nm      | ≤ 3.5 ps/km·nm                   |
|  | 1271nm - 1360 nm       | ≤ 5.3 ps/km·nm                   |
|  | @ 1550 nm              | ≤ 18.0 ps/km·nm                  |
| Zero Dispersion Wavelength, $\lambda_0$  |                        | 1300 - 1324 nm                   |
| Zero Dispersion Slope                    |                        | ≤ 0.092 ps/(km·nm <sup>2</sup> ) |
| Cut-off Wavelength, $\lambda_{cc}$       |                        | ≤ 1260 nm                        |
| Macro Bending Loss                       | 10 turns, 15 mm radius | ≤ 0.25 dB @ 1550 nm              |
|  |                        | ≤ 1 dB @ 1625 nm                 |
|  | 1 turn, 10 mm radius   | ≤ 0.75 dB @ 1550 nm              |

|  |                          |                        |
|--|--------------------------|------------------------|
|  |                          | ≤ 1.50 dB @ 1625 nm    |
| Cladding Diameter                      |                          | 125.0 ± 0.7 μm         |
| Cladding Non-circularity               |                          | ≤ 0.7%                 |
| Coating Non-circularity                |                          | ≤ 5%                   |
| Coating Diameter                       |                          | 250 ± 10 μm            |
| Core - Cladding Concentricity Error    |                          | ≤ 0.5 μm               |
| Coating - Cladding Concentricity Error |                          | ≤ 12 μm                |
| Fibre Curl Radius                      |                          | ≥ 4 m                  |
| Mode Field Diameter                    | @ 1310 nm                | 9.1 ± 0.3 μm           |
|  | @ 1550 nm                | 10.3 ± 0.5 μm          |
| Point discontinuity                    |                          | ≤ 0.05 dB              |
| Proof Stress Level                     |                          | ≥ 0.7 Gpa (≈1% strain) |
| Dynamic Tensile Strength               | Median                   | > 3.8 GPa              |
| Fatigue                                | Dynamic, aged and unaged | ≥ 20                   |
|  | Static, aged             | ≥ 23                   |
| Coating strip force                    | Average                  | 1 N to 3 N             |
|  | Peak                     | 1.3 ≤ F ≤ 8.9          |

### Colour coding (as per TIA-598-C)



### Standards

| Applicable standard | Subject   |
|---------------------|---|
| ITU G.652.D         | Characteristics of a single-mode optical fibre and cable                |
| ITU-T G.657A1       | Characteristics of a bending loss insensitive single-mode optical fiber |
| ANSI/TIA/EIA 598-C  | Optical Fibre Cable Colour Coding                                       |

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|   |   |
|---|---|
| IEC 60794-1-2:2017                        | Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures - General guidance   |
| IEC 60068-2-38:2009                       | Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test  |
| IEC 60794-5:2014                          | Optical fibre cables - Part 5: Sectional specification - Microduct cabling for installation by blowing  |
| IEC 60794-5-10:2014                       | Optical fibre cables - Part 5-10: Family specification - Outdoor microduct optical fibre cables, microducts and protected microducts for installation by blowing                |
| 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   |
|-------------|---|
| 208-812     | Excel Enbeam OS2 Singlemode G.657.A1 Blown Fibre EPFU 4 Fibre 9/125 Yellow  |
| 208-813     | Excel Enbeam OS2 Singlemode G.657.A1 Blown Fibre EPFU 8 Fibre 9/125 Yellow  |
| 208-814     | Excel Enbeam OS2 Singlemode G.657.A1 Blown Fibre EPFU 12 Fibre 9/125 Yellow |

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)



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