Excel Enbeam OS2 Singlemode G.657.A1 Blown Fibre EPFU 8 Fibre 9/125 Yellow

Item Code: 208-813

- 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
- CIBSE TM65 Embodied Carbon: 0.013 kg CO2e

Product Overview

Enbeam OS2 singlemode G.657.A1 blown fibre EPFU 8 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	8
Fibre type	Single mode 9/125
Category	OS2
Outer sheath colour	Yellow
Outer diameter approx.	1.5 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

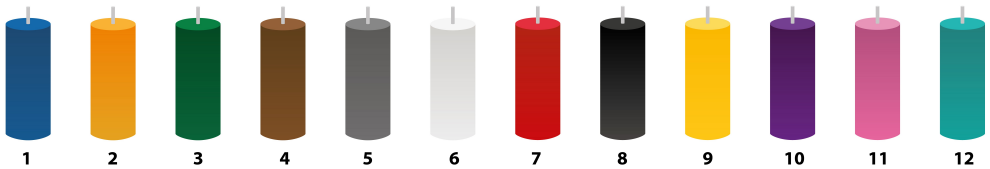
Crush (N/100 mm)	Short term	100
	Long term	50
Blowing test equipment		PLUMETTAZ: UltimaZ™
Standard duct		5.0/3.5 mm
Pressure		12 bar
Typical blowing distance	4 Fibres	1000 m
	8 Fibres	1000 m
	12 Fibres	800 m
Typical blowing time	4 Fibres	35 min
	8 Fibres	35 min
	12 Fibres	30 min
Temperature	Transportation 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, λ0		1300 - 1324 nm
Zero Dispersion Slope		≤ 0.092 ps/(km·nm2)
Cut-off Wavelength, λcc		≤ 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
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