Enbeam 8 Fibre EPFU Unit - OS2 Singlemode G657A1 blown fibre

Item Code: 208-813

- Available in OM3/OM4/OS2
- Bend Insensitive Fibres
- TIA-598-C Colour coded
- 25 Year system warranty
- Available in 4, 8 & 12-fibre bundles
- Easy strip

Product Overview

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.

The fibre units are available in OM3, OM4 and OS2 (G.657.A1 bend insensitive).

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	2.0±0.3
Tensile performance (N)	Short term	1*G
	Long term	0.3*G
Crush (N/100mm)	Short term	100
	Long term	50

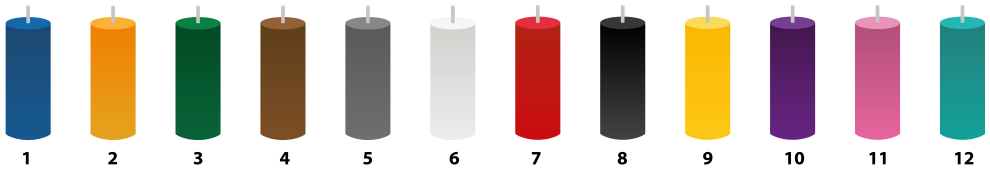
Blowing test equipment		PLUMETTAZ: UltimaZ™
Standard duct		5.0/3.5mm
Pressure		12 bar
Typical blowing distance	4 Fibres	1000m
	8 Fibres	1000m
	12 Fibres	800m
Typical blowing time	4 Fibres	35 min
	8 Fibres	35 min
	12 Fibres	30 min
Temperature	Transportation and storage	-40°C to +70°C
	Installation	-5°C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

Fibre specifications

Features		Values
Attenuation (before cabling)	@1310nm	≤0.35 dB/km
	@1550nm	≤0.21 dB/km
Attenuation (after cabling)	@1310nm	≤0.36 dB/km
	@1550nm	≤0.25dB/km
Attenuation change over wavelength range	1285nm – 1330nm	≤0.38 dB/km
	1525nm – 1575nm	≤0.25 dB/km
	1460nm – 1625nm	≤0.28 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, λ0		1300-1324nm
Zero Dispersion Slope		≤0.092 ps/(km·nm2)
Cut-off Wavelength, λcc		≤1260nm
Macro Bending Loss	10 turns, 15mm radius	≤0.03dB@1550nm
		≤0.1dB@1625nm
	1 turn, 10mm radius	≤0.1dB@1550nm

		≤0.2dB@1625nm
Cladding Diameter		125.0±0.7µm
Cladding Non-circularity		≤0.7%
Coating Non-circularity		≤5%
Coating Diameter		250±10µm
Core – Cladding Concentricity Error		≤0.5µm
Coating – Cladding Concentricity Error		≤12µm
Fibre Curl Radius		≥4m
Mode Field Diameter	@1310nm	8.80±0.5µm
	@1550nm	9.8±0.5µm
Point discontinuity		≤0.05 dB
Proof Stress Level		≥0.7 Gpa(≈1% strain)
Dynamic Tensile Strength	Median	>3.8GPa
Fatigue	Dynamic, aged and unaged	≥20
	Static, aged	≥23
Coating strip force	Average	1N to 3N
	Peak	1.2N to 8.9N

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	Restriction of Hazardous Substances - Compliant

Part Number Table

Part Number	Description
208-812	Enbeam 4 Fibre EPFU Unit - OS2 Singlemode G657A1 blown fibre
208-813	Enbeam 8 Fibre EPFU Unit - OS2 Singlemode G657A1 blown fibre
208-814	Enbeam 12 Fibre EPFU Unit - OS2 Singlemode G657A1 blown fibre