



☒ 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

☒ Gel free Dielectric design

## 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.

## Product Specifications

Feature	Values
Number of Cores	8
Fibre type	Multi mode 50/125
Category	OM3
Outer sheath colour	Yellow
Outer diameter approx.	1.5 mm
Blown system	yes

### Product drawing



### Cable specifications

Features	Values
Weight (kg/km)	4 Fibres $1.0 \pm 0.3$
	8 Fibres $1.8 \pm 0.3$
	12 Fibres $2.0 \pm 0.3$
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)	≤2.30 dB/km @850nm ≤0.60 dB/km @1300nm
Attenuation (after cabling)	≤3.50 dB/km @850nm ≤1.50 dB/km @1300nm
Overfilled Modal Bandwidth	≥1500 (MHz·km) @850nm ≥500 (MHz·km) @1300nm
Effective Modal Bandwidth	≥2000 (MHz·km) @850nm
Numerical Aperture	0.200 ± 0.015 NA
Group Index of Refraction (typical)	1.482 @850nm 1.477 @1300nm
Cladding Diameter	125.0±1.0µm
Cladding Non-circularity	≤1.0%
Core diameter	50 ± 2.5µm
Core non-circularity	≤5.0%
Core - Cladding Concentricity Error	≤1.0µm
Primary Coating Diameter	245±7µm

Primary Coating Non-circularity	$\leq 6\%$	
Primary Coating - Cladding Concentricity Error	$\leq 10\mu\text{m}$	
Zero Dispersion Wavelength, $\lambda_0$	1295-1340nm	
Zero Dispersion Slope	1295nm to 1310nm	$\leq 0.105$
	1300nm to 1320nm	0.000375 (1590- $\lambda_0$ )
Macro Bending Loss	100 turns, 30mm radius	$\leq 0.5\text{dB}@850\text{nm}$
		$\leq 0.5\text{dB}@1300\text{nm}$

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



### Standards

Applicable standard	Subject
ITU-T G.651.1:2018	Characteristics of a 50/125 $\mu\text{m}$ multimode graded index optical fibre cable for the optical access network
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
208-816	Excel Enbeam OM3 Multimode Blown Fibre EPFU 4 Fibre 50/125
208-817	Excel Enbeam OM3 Multimode Blown Fibre EPFU 8 Fibre 50/125
208-818	Excel Enbeam OM3 Multimode Blown Fibre EPFU 12 Fibre 50/125

Excel is a world class premium performing end to end infrastructure solution designed,  
Manufactured, supported and delivered without compromise.

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E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.

**excel**  
without compromise.