Item Code: 208-818











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

#### **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.

X Easy strip

Gel free Dielectric design

The fibre units are available in OM3, OM4 and OS2.

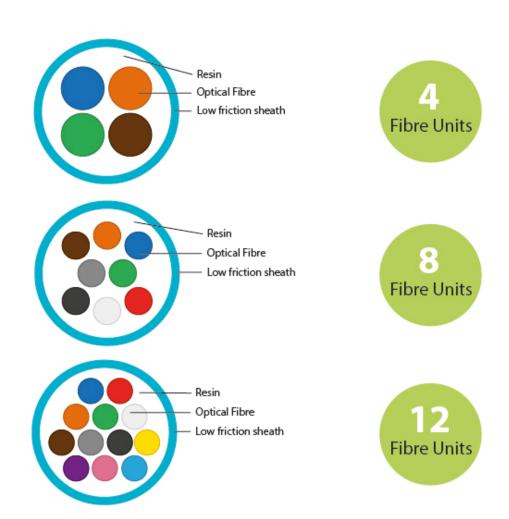
#### **Product Specifications**

Feature	Values
Number of Cores	12
Fibre type	Multi mode 50/125
Category	ОМЗ
Outer sheath colour	Yellow
Outer diameter approx.	1.65 mm
Blown system	yes

Item Code: 208-818



### **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

Item Code: 208-818



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

Item Code: 208-818



Primary Coating Non-circularity		≤6%
Primary Coating – Cladding Concentricity Error		≤10μm
Zero Dispersion Wavelength, λ0		1295-1340nm
Zero Dispersion Slope	1295nm to 1310nm	≤0.105
	1300nm to 1320nm	0.000375 (1590·λο)
Macro Bending Loss	100 turns, 30mm radius	≤0.5dB@850nm
		≤0.5dB@1300nm

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



#### **Standards**

Applicable standard	Subject
ITU-T G.651.1:2018	Characteristics of a 50/125 $\mu m$ 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

Item Code: 208-818



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.



Contact us at sales@excel-networking.com

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