Excel Enbeam OM3 Multimode Blown Fibre EPFU 4 Fibre 50/125

Part Code: 208-816

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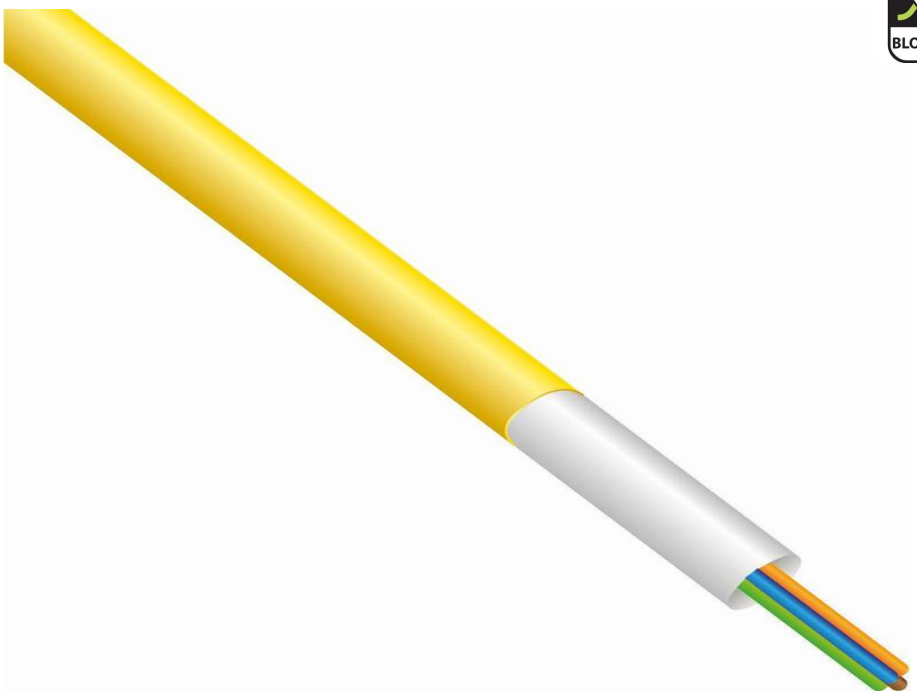

Main Features

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

Product Specifications

Feature	Values
Number of Cores	**4**
Fibre type	**Multi mode 50/125**
Category	**OM3**
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	**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)	**@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 ± 0.015 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 ± 2.5μm**
Core non-circularity		**≤5.0%**
Core – Cladding Concentricity Error		**≤1.0μm**
Primary Coating Diameter		**245±7μm**
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·λo)**
Macro Bending Loss	**100 turns, 30mm radius**	**≤0.5dB@850nm**
		≤0.5dB@1300nm

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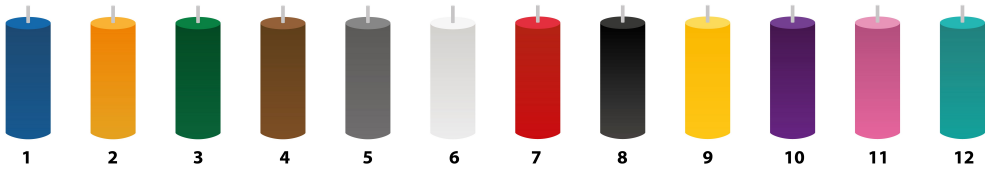
Colour coding (as per TIA-598-C)



Standards

Applicable standard	Subject
ITU-T G.651.1:2018	Characteristics of a 50/125 µm 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
Directive 2011/65/EU (RoHS II)	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — compliant. Applies within EU member states).
Directive (EU) 2015/863 (RoHS III)	Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.
Directive 2008/98/EC (WFD)	Waste Framework Directive — compliant. Implemented in the UK through the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988).
ECHA SCIP Database	Compliant; product does not contain SVHCs (Substances of Very High Concern) as defined under REACH Article

	33(1). Submission obligations met under EU REACH and UK REACH.
Regulation (EU) 2019/1021 (POPs)	EU Regulation on Persistent Organic Pollutants — compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).
UK SI 2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK RoHS) — compliant for Great Britain. Retained EU law, as amended by the Product Safety and Metrology (Amendment etc.) (EU Exit) Regulations 2019.

Part Code Table

Part Code	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**