Excel Enbeam OS2 Micro Blown G.657.A1 200 µm Fibre Cable Loose Tube 144 Core HDPE Fca Black

Part Code: 328-144

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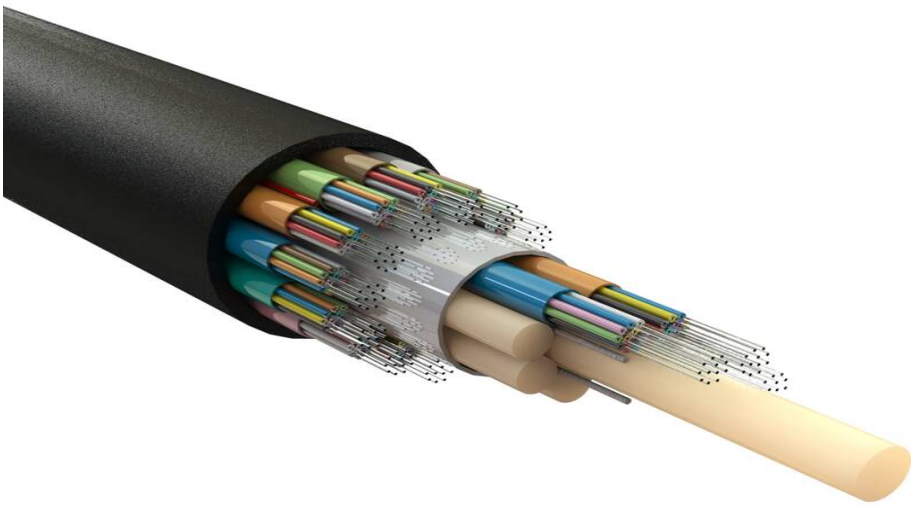

Main Features

- G.657.A1 Bend insensitive
- Small light weight design
- Euroclass: Fca
- High core count
- Recommended internal duct size - 10 mm
- High Density Polyethylene (HDPE) outer jacket

Product Overview

Enbeam OS2 micro blown SM G.657.A1 200 µm fibre cable loose tube 144 core 9/125 HDPE Fca black, part of a huge range of OS2 fibre optic cables fully stocked at Mayflex. The Enbeam Micro Blown 200 µm fibre has been designed for blowing into the Enbeam Micro-duct system.

The cable is constructed from multiple gel filled loose tubes around a central strength member, overlaid with water blocking yarn and covered with a High Density Polyethylene (HDPE) outer jacket.

The small diameter 5.6 mm to 9.6 mm allows high core count fibres to be blown into the access network down micro-duct with an inner diameter as small as 10 mm to 14 mm.

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Please note this cable is used for blown systems only and should not be manually pulled into ducts.

Product Specifications

Feature	Values
Number of Cores	**144**
Type of tube	**Loose tube**
Number of fibres per tube	**24**
Fibre type	**Single mode 9/125**
Category	**OS2**
Outer sheath material	**HDPE**
Outer sheath colour	**Black**
Reaction-to-fire class according to EN 13501-6	**Fca**
Outer diameter approx.	**5.6 mm**
Blown system	**yes**

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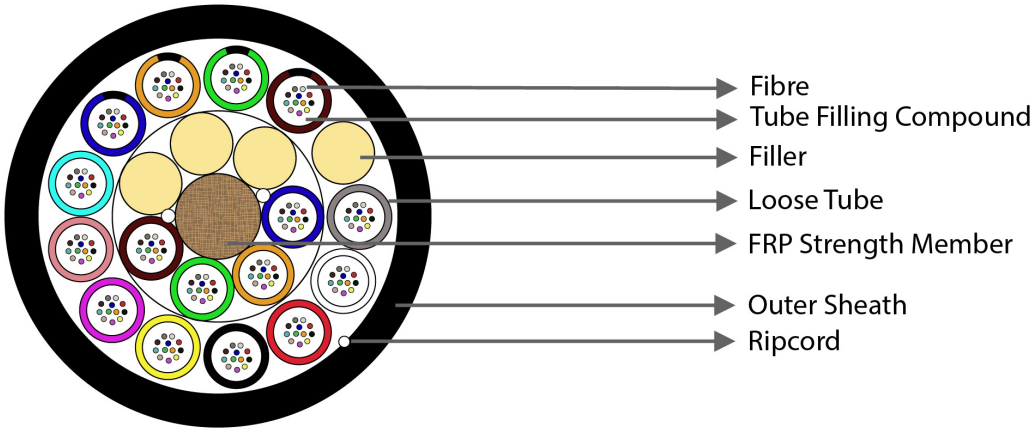
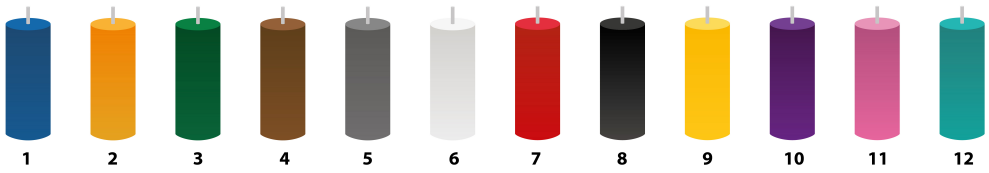
Product drawing



Colour coding (as per TIA-598-C)



For fibre core counts above 12 the colour sequence is repeated with the addition of a mark every 70mm for cores 13-24 and two marks for 25-36 and so on.

Cable specifications

Features		Values
Weight (kg/km)	**144-core**	**46 (nominal)**
	192-core	**51 (nominal)**
	288-core	**65 (nominal)**

	432-core	**79 (nominal)**
Loose tube material		**PBT**
Type of filling compound		**Jelly**
Number of loose tubes/fillers	**144-core**	**12/0**
	192-core	**16/4**
	288-core	**24/0**
	432-core	**18/0**
Central strength member type		**FRP**
Tensile performance (N)	**long term**	**0.15G**
	short term	**0.5G**
Crush Resistance	**long term**	**150 N/100mm**
	short term	**450 N/100mm**
Minimum Bending Radius	**short term**	**10D**
	long term	**20D**
Temperature	**operating**	**-20°C to +70°C**

Fibre specifications

Features		Values
Attenuation	**@1310nm**	**≤0.4 dB/km**
	@1383nm	**≤0.4 dB/km**
	@1550nm	**≤0.30 dB/km**
	@1625nm	**≤0.30 dB/km**
Chromatic Dispersion Coefficient	**1288nm – 1339nm**	**≤3.5ps/km·nm**

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	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**
Polarization mode dispersion	**Individual fibre**	**≤0.2ps/√Km**
	Design link value (M=20, Q=0.01%)	**≤0.1ps/√Km**
Macro Bending Loss	**10 turns, 15mm radius**	**≤0.25dB@1550nm**
		≤1.0dB@1625nm
	1 turns, 10mm radius	**≤0.75dB@1550nm**
		≤1.5dB@1625nm
Cladding Diameter		**125.0±1.0µm**
Cladding Non-circularity		**≤1.0%**
Primary Coating Diameter		**200±15µm**
Core Concentricity Error		**≤0.6µm**
Coating – Cladding Concentricity Error		**≤12µm**
Fibre Curl Radius		**≥4m**
Mode Field Diameter	**@1310nm**	**8.6-9.5±0.4µm**
Point discontinuity		**≤0.05dB**
Proof Stress Level		**≥100kpsi (0.69 GPa)**
Coating strip force	**Peak**	**1.3-8.9N**

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Standards

Applicable standard	Subject
IEC 60793-1-1:2022	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
IEC 60793-1-20:2014	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry
IEC 60793-1-21:2001	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry
IEC 60793-1-22:2001	Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement
IEC 60793-1-30:2010	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test
ITU G.652.D	Characteristics of a single-mode optical fibre and cable
ITU-T G.657	Characteristics of a bending-loss insensitive single-mode optical fibre and cable
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50575: 2014 + A1: 2016	Power, control and communication cables — Cables for general applications in construction works subject to reaction to fire requirements
EN 50399:2011+A1:2016	Common test methods for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
ANSI/TIA 568-3.D	Optical Fiber Cabling and Components Standard
ANSI/TIA/EIA 598-D	Optical Fibre Cable Colour Coding
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
328-144	**Excel Enbeam OS2 Micro Blown G.657.A1 200 ?m Fibre Cable Loose Tube 144 Core HDPE Fca Black**
328-288	**Excel Enbeam OS2 Micro Blown G.657.A1 200 ?m Fibre Cable Loose Tube 288 Core HDPE Fca Black**
328-432	**Excel Enbeam OS2 Micro Blown G.657.A1 200 ?m Fibre Cable Loose Tube 432 Core HDPE Fca Black**