

✗ Water Resistant & UV Resistant

✗ Duct grade - high core count

✗ Sequentially metre marked

✗ Cut to length service

✗ Euroclass Fca

✗ High Density Polyethylene (HDPE) outer jacket

## Product Overview

Enbeam OS2 Singlemode G.652.D Fibre Cable Multi Loose Tube 96 Core 9/125 HDPE Fca Black, part of a huge range of OS2 fibre optic cables fully stocked at Mayflex.

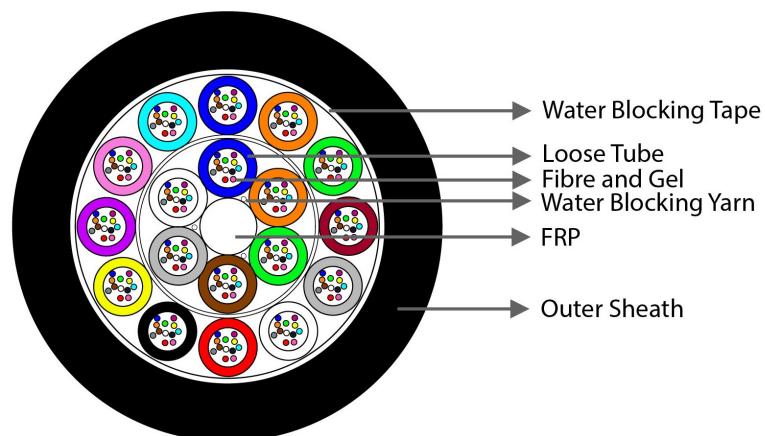
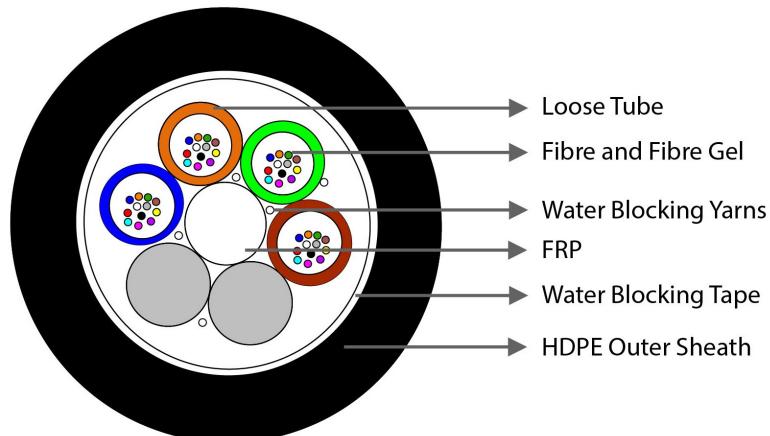
The Enbeam external multi loose tube fibre has been designed for installation in underground duct systems.

The cable is constructed from multiple gel filled loose tubes around a central strength member, overlaid with water blocking yarn and a water blocking tape then covered with a High Density Polyethylene (HDPE) outer jacket, allowing high core count fibres to be installed into the access network from 12 to 432 fibre core counts.

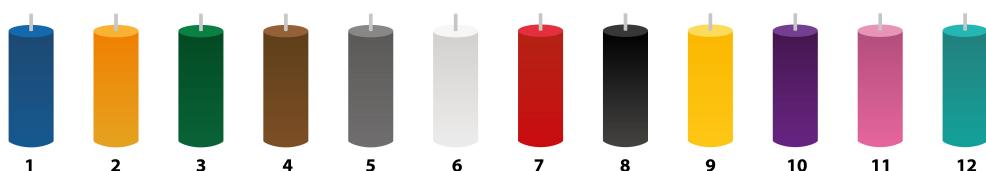
## Product Specifications

Feature	Values
Number of Cores	96
Type of tube	Loose tube
Number of fibres per tube	12
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.	10 mm

### 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)	12-24 core 55.0 (nominal)
	48-72 core 55.0 (nominal)
	96-core 80.0 (nominal)
	144-core 130.0 (nominal)
	192-core 145.0 (nominal)
	288-core 170.0 (nominal)
	432-core 200.0 (nominal)
Number of loose tubes/fillers	12-core 1/5
	24-core 2/4
	48-core 4/2
	72-core 6/0
	96-core 8/0
	144-core 12/0
	192-core 16/2
	288-core 24/0
	432-core 36/0
Embedding strength member	Type FRP
Loose tube filling compound	Jelly
Water blocking material	Water blocking yarn + water blocking tape
Outer sheath	Material HDPE
Tensile strength	2000 N
Crush resistance	2000 N
Minimum bending radius	20D

### Fibre specifications

Features		Values
Attenuation	@1310 nm	≤0.35 dB/km
	@1550 nm	≤0.21 dB/km
Chromatic Dispersion Coefficient	1285 nm - 1330 nm	≤3.5 ps/km·nm
	@1550 nm	≤18 ps/km·nm
Zero Dispersion Wavelength, $\lambda_0$		1300-1324 nm
Zero Dispersion Slope		≤0.092 ps/(km·nm <sup>2</sup> )
Cut-off Wavelength, $\lambda_{cc}$		≤1260 nm
Polarization mode dispersion	Individual fibre	≤0.2 ps/vKm
	Design link value (M=20, Q=0.01%)	≤0.1 ps/vKm
Cladding Diameter		125±0.7 $\mu$ m
Cladding Non-circularity		≤1.0%
Primary Coating Diameter		245±10 $\mu$ m
Core Concentricity Error		≤1.0 $\mu$ m
Coating - Cladding Concentricity Error		≤0.8 $\mu$ m
Fibre Curl Radius		≥4 m
Mode Field Diameter	@1310 nm	9.2±0.4 $\mu$ m
Point discontinuity		≤0.5 dB
Proof Stress Level		≥100 ksi (0.69 GPa)
Coating strip force	Peak	1.3-8.9 N

### 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
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
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
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
330-012	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 12 Core HDPE Fca Black
330-024	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 24 Core HDPE Fca Black
330-048	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 48 Core HDPE Fca Black
330-072	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 72 Core HDPE Fca Black
330-096	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 96 Core HDPE Fca Black
330-144	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 144 Core HDPE Fca Black
330-192	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 192 Core HDPE Fca Black

# Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 96 Core HDPE Fca Black

Item Code: 330-096



330-288	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 288 Core HDPE Fca Black
330-432	Excel Enbeam OS2 G.652.D Fibre Cable Multi Loose Tube 432 Core HDPE Fca Black

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](mailto:sales@excel-networking.com)

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

