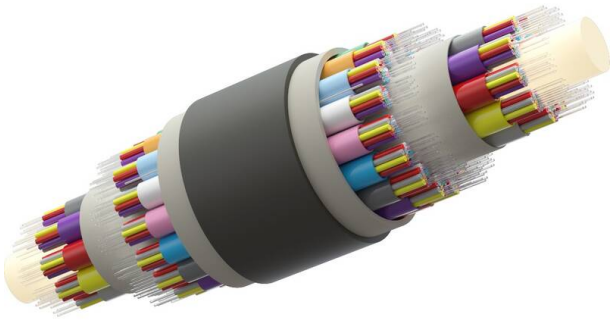
Excel Enbeam OS2 G.657.A1 Fibre Cable Multi Loose Tube 288 Core HDPE Fca Black

Item Code: 332-288



- G.657.A1 bend insensitive
- 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.657.A1 Fibre Cable Multi Loose Tube 288 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.

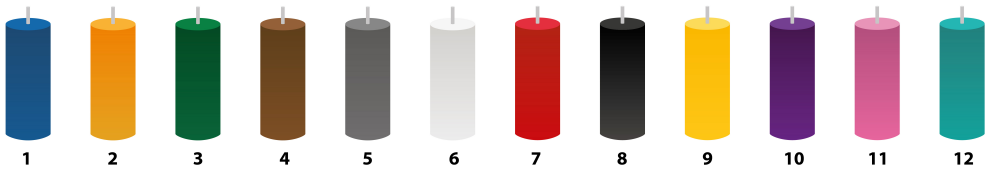
The cable is constructed from multiple gel filled loose tubes around a central strength member, overlaid with water blocking yarn and a water blocking tape then covered with an High Density Polyethylene (HDPE) outer jacket, allowing high core count fibres to be installed into the access network from 12 to 288 Fibre core counts.

Product Specifications

Feature	Values
Number of Cores	288
Type of tube	Loose tube
Number of fibres per tube	12
Fibre type	Single mode 9/125
Category	OS2
Outer sheath colour	Black
Reaction-to-fire class according to EN 13501-6	Fca
Outer diameter approx.	15 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)	
288-core	170.0 (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	
288-core	24/0	
Tensile strength		2000 N
Crush resistance		2000 N
Minimum bending radius	During installation	20D
After installation	10D	
Temperature	Operating	-10°C to +70°C

Fibre specifications

Features		Values
Attenuation	@1310nm	≤0.35 dB/km
@1550nm	≤0.21 dB/km	
Chromatic dispersion coefficient	1285nm - 1330nm	≤3.5ps/km·nm
@1550nm	≤18ps/km·nm	
Zero dispersion wavelength, λ0		1300-1324 nm
Zero dispersion slope		≤0.092 ps/(km·nm2)
Cut-off wavelength, λcc		≤1260 nm
Polarization mode dispersion	Individual fibre	≤0.2ps/√Km
Design link value (M=20, Q=0.01%)	≤0.1ps/√Km	
Cladding diameter		125.0±1.0 µm
Cladding non-circularity		≤2.0%
Primary coating diameter		245±10 µm
Core concentricity error		≤0.8 µm
Coating - cladding concentricity error		≤0.8 µm
Fibre curl radius		≥4m
Mode field diameter	@1310nm	9.2±0.4 µm
Point discontinuity		≤0.5 dB

Proof stress Level		≥100kpsi (0.69 GPa)
Coating strip force	Peak	1.3-8.9 N

Standards

Applicable standard	Subject
IEC 60332-1-2:2004	Tests on electric and optical fibre cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable. Procedure for 1 kW pre-mixed flame
IEC 60754-2:2014+A1:2020	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2:2005+A2:2020	Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements
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
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

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

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