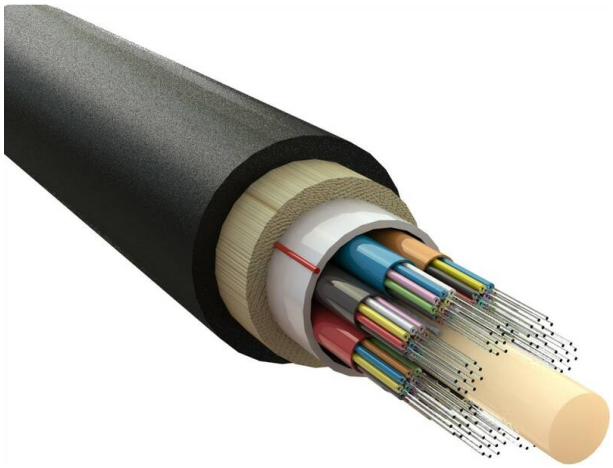
Excel Enbeam OS2 Singlemode Int/Ext Distribution Cable G.652.D 250 µm 48 Core B2ca Black

Item Code: 295-314



- Water resistant
- Duct grade
- Sequentially metre marked
- Cut to length service
- Euroclass: B2ca-s1b,d0,a1
- 25 year system warranty
- CIBSE TM65 Embodied Carbon: 0.245 kg CO2e

Product Overview

Excel Enbeam OS2 distribution cables have been designed specifically for internal and external applications. The single mode fibre is G.652.D compliant low water peak grade and offers OS2 performance and OS1 backwards compatibility.

The cables are constructed using multiple LSOH sub cables with 12x coloured 250 µm fibres surrounded by aramid yarn and water blocking yarn which are then wrapped with water blocking tape around a central FRP strength member.

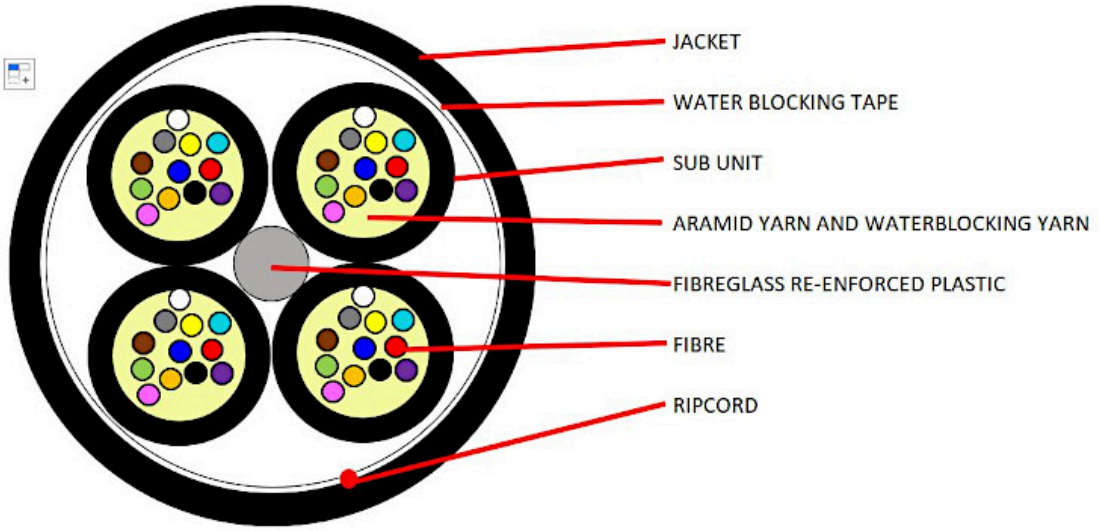
This allows the cable to be used in both external and internal applications with a Euroclass rating of B2ca.

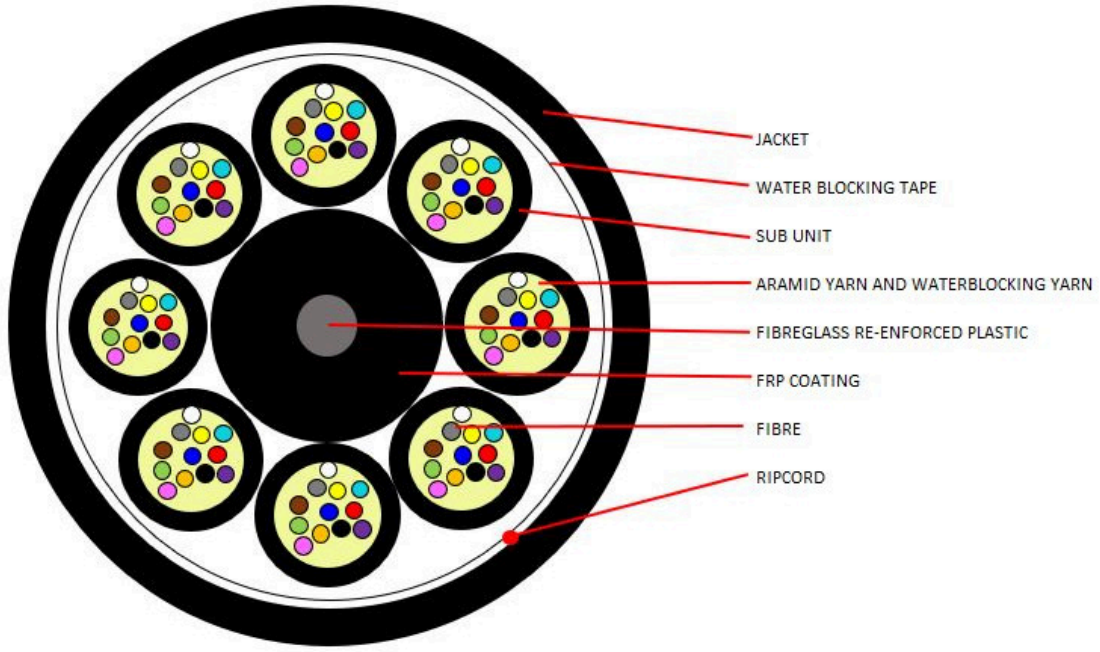
Product Specifications

Feature	Values
Number of Cores	48
Type of tube	Sub unit
Number of fibres per tube	12
Fibre type	Single mode 9/125
Category	OS2
Rodent resistant	no
Outer sheath material	Copolymer, thermoplastic (LS0H)

Outer sheath colour	Black
Reaction-to-fire class according to EN 13501-6	B2ca
Smoke development class according to EN 13501-6	s1b
Euro class flaming droplets/particles according to EN 13501-6	d0
Euro class acidity according to EN 13501-6	a1
Outer diameter approx.	9.2 mm

Product drawing





Cable specifications

Features		Values
Tensile strength	Long term	400N
	Short term	1320N
Crush resistance	Long term	200N/m
	Short term	1000N/m
Torsion		± 180 º
Impact		1N/m
Temperature performance	Installation	-30ºC to +70ºC
	Operation	-30ºC to +70ºC
	Storage	-30ºC to +70ºC
Sub units		4
Sub unit OD		3.0 ± 0.1mm
Sub unit thickness		0.45 ± 0.05mm
Sub unit material		LSZH
Number of fibre per sub unit		12
Peripheral Strength member		Aramid Yarn
Central strength member		FRP
Water blocking		Water blocking tape and yarn

Outer sheath

	Material	LSZH
Ripcord	Number	1
	Material	Polyester
Bending radius	Short term	20 x Diameter
	Long term	10 x Diameter
Attenuation	@1310nm	≤ 0.40 dB/km
	@1550 nm	≤ 0.30 dB/km
Core Cladding concentricity error		≤ 0.6 µm
Cladding diameter		125 ± 1 µm
Cladding non-circularity		≤ 1 %
Coating diameter		250 ± 10 µm

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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