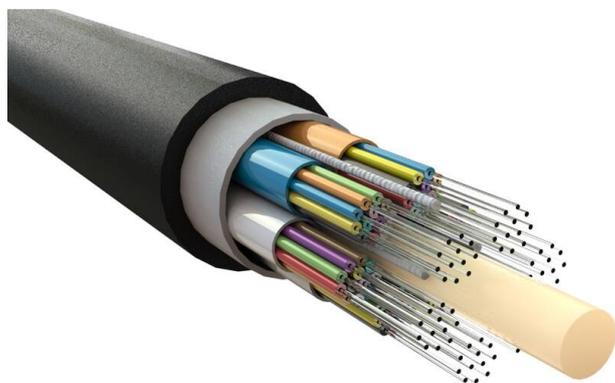


# Excel Enbeam OM4 Multimode Fibre Optic Cable Multi Tube 48 Core 50/125 LSOH B2ca Violet

Item Code: 204-149-VT

**excel**  
without compromise.



Suitable for internal use only

Multi tube configuration

LSZH

Euro class B2ca-s1b,d0,a1

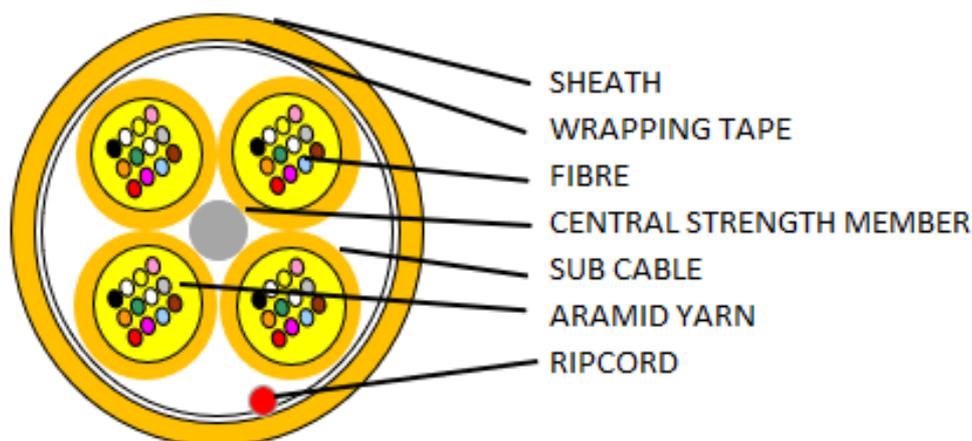
## Product Overview

Excel Enbeam OM4 distribution cables have been designed specifically for internal applications. The cables are constructed using multiple LSZH sub cables with 12 x coloured 250um fibres surrounded by aramid yarn around a central FRP strength member. This allows the cable to be used in internal applications with a euro class rating of B2ca.

## Product Specifications

Feature	Values
Number of Cores	48
Type of tube	Tight
Fibre type	Multi mode 50/125
Category	OM4
Outer sheath material	LSZH
Outer sheath colour	Violet
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

### Cross-section diagram



### Cable specifications

Features		Values
Tensile Strength	Long Term	275N
	Short term	800N
Temperature performance	Installation	-40°C to +60°C
	Operation	-40°C to +60°C
	Storage	-40°C to +60°C
Sub Units		4
Sub Unit OD		3.0 ± 0.1 mm
Sub Unit Material		LSZH
Number of fibre per Sub Unit		12
Peripheral Strength Member		Aramid Yarn
Central Strength Member		FRP

### Outer Sheath

	Material	LSZH
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter
Attenuation	@850 nm	≤ 3.5 dB/km

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@1300 nm  $\leq 1.5$  dB/km

Core Cladding Concentricity Error  $\leq 0.5$   $\mu$ m

Cladding Diameter  $125 \pm 1$   $\mu$ m

Cladding Non-circularity  $\leq 1$  %

Coating Diameter  $125 \pm 0.7$   $\mu$ m

## Standards

Applicable standard	Subject
IEC 60794-2-20:2013	Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables
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 60754-2:2011	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2:2005+A1:2013	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 60793-2-10:2017	Sectional specification for A1 multimode fibres
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
IEC 60793-1-41:2010	Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth
ITU G.651.1	Characteristics of a 50/125 $\mu$ m multimode graded index optical fibre cable for the optical access network
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50575: 2014 + A1: 2016	Power, control and communication cables — Cables for

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	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 Number Table

Part Number	Description
204-149-VT	Excel Enbeam OM4 Multimode Fibre Optic Cable Multi Tube 48 Core 50/125 LSOH B2ca Violet

Excel is a world class premium performing end to end infrastructure solution designed, Manufactured, supported and delivered without compromise.

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