

✗ Suitable for internal use only

✗ Multi tube configuration

✗ LSZH

✗ Euro class B2ca-s1b,d0,a1

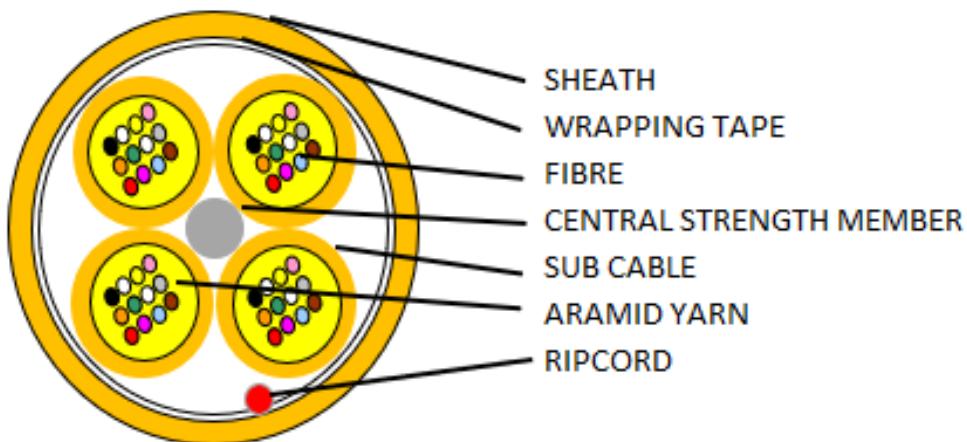
## Product Overview

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

	@1300 nm	$\leq 1.5 \text{ dB/km}$
Core Cladding Concentricity Error		$\leq 0.5 \mu\text{m}$
Cladding Diameter		$125 \pm 1 \mu\text{m}$
Cladding Non-circularity		$\leq 1 \%$
Coating Diameter		$125 \pm 0.7 \mu\text{m}$

## 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 $\mu\text{m}$ 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

	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

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

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