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#### **Product Overview**

Excel Enbeam OM5 distribution cables have been designed specifically for internal applications. The multi mode fibre offers OM5 performance and backwards compatibility.

The cables are constructed using multiple buffered fibres from 4 to 24 coloured 900  $\mu$ m fibres surrounded by aramid yarn around a central FRP strength member.

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

#### **Product Specifications**

Feature	Values
Number of Cores	16
Type of tube	Tight
Number of fibres per tube	16
Fibre type	Multi mode 50/125
Category	OM5
Outer sheath material	LSZH
Outer sheath colour	Lime green
Reaction-to-fire class according to EN 13501-6	B2ca
Smoke development class according to EN 13501-6	sla
Euro class flaming droplets/particles according to EN 13501-6	d1
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	6.5 mm

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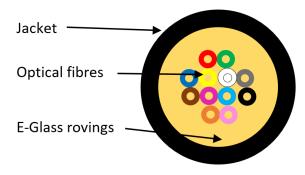
## Additional specifications

Feature	Value	
Tensile Strength	Long Term	300 N
	Short term	900 N
Crush Resistance	Long Term	300 N/m
	Short term	1000 N/m
Temperature performance	Installation	-5°C to +70°C
	Operation	-20°C to +70°C
	Storage	-40°C to +70°C
Number of fibre		45508
Peripheral Strength Member		E Glass
Central Strength Member		GFRP
Outer Sheath	Thickness	1.0 mm (Nominal)
	Material	LSZH
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter
Attenuation	@850nm	≤ 3.5 dB/km
	@1300 nm	≤1.5 dB/km
Core Cladding Concentricity Error		≤ 2 μm
Cladding Diameter		125 ± 1 μm
Cladding Non-circularity		≤ 6 %
Coating Diameter		250 ± 10 μm
Coating Cladding Concentricity Error		≤ 12.5

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### **Cross-section diagram**



#### **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

# Excel Enbeam OM5 Tight Buffered 16 Core Internal Cable LSOH B2ca Lime Green

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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 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
299-104	Excel Enbeam OM5 Tight Buffered 4 Core Internal Cable LSOH B2ca Lime Green
299-108	Excel Enbeam OM5 Tight Buffered 8 Core Internal Cable LSOH B2ca Lime Green
299-112	Excel Enbeam OM5 Tight Buffered 12 Core Internal Cable LSOH B2ca Lime Green
299-116	Excel Enbeam OM5 Tight Buffered 16 Core Internal Cable LSOH B2ca Lime Green
299-124	Excel Enbeam OM5 Tight Buffered 24 Core Internal Cable LSOH B2ca Lime Green

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



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