

Item Code: 204-702









X 25 Year system warranty
X Sequentially metre marked
X Bend insensitive core construction
X Internal grade

X Euroclass Cca-s1a-d0-a1

#### **Product Overview**

Enbeam OM5 multimode tight buffered optical fibre cables have been designed specifically for internal applications. The OM5 multimode optical fibre cable will support 40, 100 and 400 Gigabit Ethernet channel distances of (i) 440 metres for 40 Gigabit, (ii) 350 metres for 100 Gigabit and (iii) 150 metres for 400 Gigabit applications. The cable construction consists of up to 24 colour coded 900µm tight buffered 50/125µm fibres, covered with a flame retardant LS0H outer sheath.

The cable legend includes Euroclass information as standard for clear classification and traceability on CPR.

#### **Product Specifications**

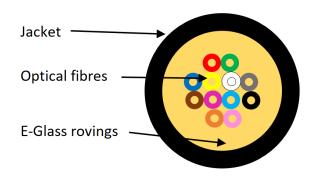
Feature	Values
Number of Cores	12
Type of tube	Tight
Fibre type	Multi mode 50/125
Category	OM5
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Green
Flame retardant according to IEC 60332-1-2	yes
Low smoke (acc. IEC 61034-2)	yes
Reaction-to-fire class according to EN 13501-6	Cca
Smoke development class according to EN 13501-6	sla
Euro class flaming droplets/particles according to EN	d0



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13501-6	
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	7 mm

### **Cross-section diagram**



### **Cable specifications**

Features		Values
Fibre Colour Code Standard		TIA 598
Strength members		E-Glass Rovings
Tensile Strength (during installation)	4 to 12 cores	1500N
	16 cores	2100N
	24 cores	2400N
Tensile strength (installed)	4 to 12 cores	500N
	16 cores	1000N
	24 cores	1500N
Impact		20J
Crush		3000N/100mm
Torsion		5 cycles +/1 1 turn
Temperature range (installed)		-20 to +70C
Temperature range (storage)		-40 to +70C



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### Fibre specifications

Features	Values
Core diameter	50.0 +/- 2.5um
Cladding diameter	125.0 +/- 0.8um
Primary Coating diameter	245 +/- 7um
Max. attenuation at 850nm	1.0 dB/km
Max. attenuation at 953nm	1.7 dB/km
Max attenuation at 1300nm	1.0 dB/km
Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
Numerical aperture	0.200 +/- 0.015
Bandwidth at 850nm	3500 MHz.km
Bandwidth at 952nm	1850 MHz.km
Bandwidth at 1300nm	500 MHz.km

#### **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 $1\mathrm{kW}$ 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



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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 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
204-700	Excel Enbeam OM5 Multimode Internal Fibre Optic Cable Tight Buffered 4 Core 50/125 Cca Lime Green
204-701	Excel Enbeam OM5 Multimode Internal Fibre Optic Cable Tight Buffered 8 Core 50/125 Cca Lime Green
204-702	Excel Enbeam OM5 Multimode Internal Fibre Optic Cable Tight Buffered 12 Core 50/125 Cca Lime Green



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204-703	Excel Enbeam OM5 Multimode Internal Fibre Optic Cable Tight Buffered 16 Core 50/125 Cca Lime Green
204-704	Excel Enbeam OM5 Multimode Internal Fibre Optic Cable Tight Buffered 24 Core 50/125 Cca Lime Green

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



Contact us at sales@excel-networking.com

E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.