





### **Product Overview**

Excel OM5 50/125  $\mu$ m loose tube optical fibre cables have been designed specifically for internal and external applications. These compact, lightweight cables are extremely flexible and are quick and easy to install. The cables are constructed around a gel free tube containing up to 24 colour coded 250  $\mu$ m primary coated fibres. This tube is covered with an E-glass strength member. The print legend on the cable now includes information regarding the DOP number, test and classification of the cable for traceability.

#### **Product Specifications**

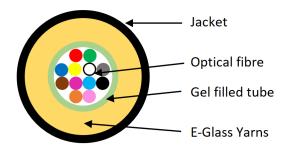
Feature	Values
Number of Cores	4
Type of tube	Loose tube
Number of fibres per tube	4
Fibre type	Multi mode 50/125
Category	OM5
Outer sheath material	LSZH
Outer sheath colour	Lime green
Reaction-to-fire class according to EN 13501-6	B2ca
Smoke development class according to EN 13501-6	sla
Euro class flaming droplets/particles according to EN 13501-6	d0
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	6 mm



## Additional specifications

Feature	Value	
Tensile Strength	Long term	300 N
	Short term	1000 N
Crush Resistance	Long term	300 N/m
	Short term	1000 N/m
Temperature performance	Installation	-30°C to +60°C
	Operation	-400°C to +60°C
	Storage	-40°C to +60°C
Peripheral Strength Member		E Glass
Outer Sheath	Thickness	1.1 mm (Nominal)
	Material	LSZH
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter
Attenuation	@850 nm	1.0 dB/km
	@1300 nm	1.0 dB/km
Cladding Diameter		125 ± 07 μm
Cladding Non-circularity		≤1%
Coating Diameter		$250 \pm 15 \mu\text{m}$

## **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
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
298-004	Excel Enbeam OM5 L/Tube 4C LSOH B2ca 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.