



✗ Water Resistant & UV Resistant

✗ Duct grade - Rodent resistant

✗ Sequentially metre marked

✗ Cut to length service

✗ Euroclass: Eca

✗ 25 Year system warranty

✗ CIBSE TM65 Embodied Carbon: 1.235 kg CO<sub>2</sub>e

## Product Overview

Enbeam OM3 Multimode SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core 50/125 Eca Black.

Excel steel wire (SWA) OM3 50/125 µm armoured loose tube optical fibre cables have been designed specifically for direct burial and the most demanding of installations.

These cables are constructed from standard single loose tube cables which are then packed into a flexible but strong fibreglass water blocking strength member.

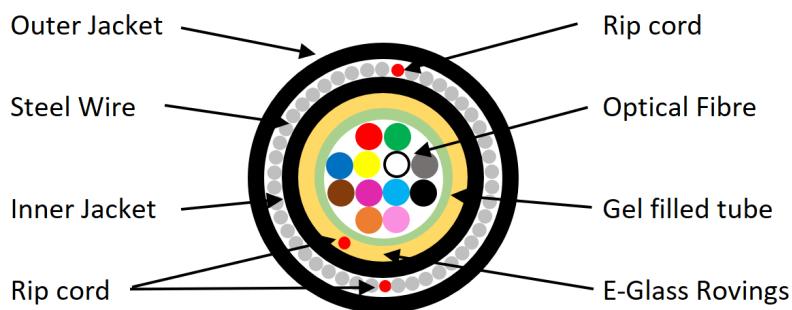
An internal sheath with a rip cord is inserted with lengths of steel wire armouring over the top and then an oversheath is added providing a strong but flexible cable assembly.

## 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	OM3
Rodent resistant	yes

Outer sheath material	Copolymer, thermoplastic (LSOH)
Outer sheath colour	Black
Reaction-to-fire class according to EN 13501-6	Eca
Outer diameter approx.	10.5 mm

### Cross-section diagram



### Cable specifications

Features	Values
Tensile Strength	3000N
Crush Resistance	1500N/m
Torsion	± 180 °
Temperature performance	
Installation	-30°C to +70°C
Operation	-30°C to +70°C
Storage	-30°C to +70°C
Loose tubes	1
Loose Tube ID/OD	2.2/3.2 ± 0.1 mm
Peripheral Strength Member	Glass Yarn
Armoring	
Thickness	0.8 mm
Material	Soft Zinc Coated Steel Wires
Outer Sheath	
Thickness	1.4 mm (Nominal)
Material	LSZH
Ripcord	
Number	3

	Material	Polyester
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter
Attenuation	@850nm	≤ 3.0 dB/km
	@1300 nm	≤ 1.0 dB/km
Core Cladding Concentricity Error		≤ 1 µm
Cladding Diameter		125 ± 1 µm
Cladding Non-circularity		≤ 1 %
Coating Diameter		250 ± 10 µm

## Standards

Applicable Standard	Subject
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 60754-2:2014+A1:2020	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2:2005+A2:2020	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 60793-1-20:2014	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
ITU G.652.D	Characteristics of a single-mode optical fibre and cable
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
205-376	Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black
205-377	Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 8 Core Eca Black
205-378	Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 12 Core Eca Black

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

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