

# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black

excel  
without compromise.

Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

CIBSE TM65 Embodied Carbon: 1.235 kg CO2e



## Main Features

- / Water Resistant & UV Resistant
- / Duct grade - Rodent resistant
- / Sequentially metre marked
- / Cut to length service
- / Euroclass: Eca
- / 25 Year system warranty

## 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  $\mu\text{m}$  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.

# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black

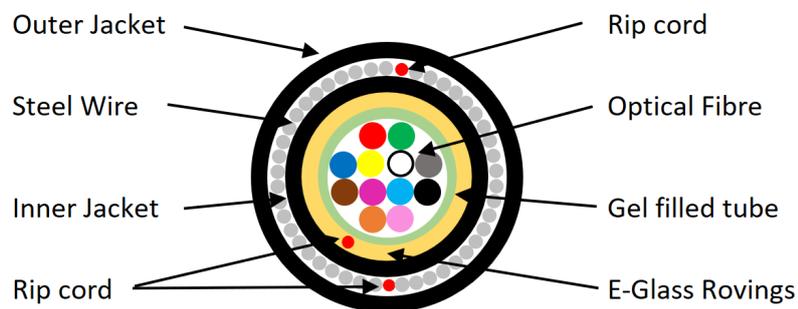
Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

## 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



# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black

Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

## Cable specifications

Features		Values
Tensile Strength		3000N
Crush Resistance		1500N/m
Torsion		± 180°
Temperature performance	<b>Installation</b>	-30°C to +70°C
	<b>Operation</b>	-30°C to +70°C
	<b>Storage</b>	-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	<b>Thickness</b>	0.8 mm
	<b>Material</b>	Soft Zinc Coated Steel Wires
Outer Sheath	<b>Thickness</b>	1.4 mm (Nominal)
	<b>Material</b>	LSZH
Ripcord	<b>Number</b>	3
	<b>Material</b>	Polyester
Bending Radius	<b>Short term</b>	20 x Diameter
	<b>Long term</b>	10 x Diameter
Attenuation	<b>@850nm</b>	≤ 3.0 dB/km
	<b>@1300 nm</b>	≤ 1.0 dB/km
Core Cladding Concentricity Error		≤ 1 µm
Cladding Diameter		125 ± 1 µm
Cladding Non-circularity		≤ 1 %

# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black

Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

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

# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black

Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

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
Directive 2011/65/EU (RoHS II)	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — compliant. Applies within EU member states).
Directive (EU) 2015/863 (RoHS III)	Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.
Directive 2008/98/EC (WFD)	Waste Framework Directive — compliant. Implemented in the UK through the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988).
ECHA SCIP Database	Compliant; product does not contain SVHCs (Substances of Very High Concern) as defined under REACH Article 33(1). Submission obligations met under EU REACH and UK REACH.
Regulation (EU) 2019/1021 (POPs)	EU Regulation on Persistent Organic Pollutants — compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).
UK SI 2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK RoHS) — compliant for Great Britain. Retained EU law, as amended by the Product Safety and Metrology (Amendment etc.) (EU Exit) Regulations 2019.

# Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black



Part Code: 205-376

sales@excel-networking.com  
excel-networking.com

## Part Code Table

Part Code	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