

Excel Enbeam OM3 SWA Direct Burial Fibre Optic Cable Loose Tube 8 Core Eca Black

excel
without compromise.

Part Code: 205-377

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

CIBSE TM65 Embodied Carbon: 1.231 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 8 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.

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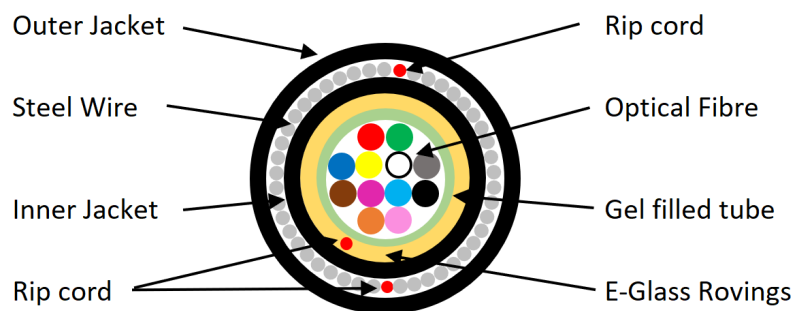
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Product Specifications

| Feature | Values |
|--|---------------------------------|
| Number of Cores | 8 |
| Type of tube | Loose tube |
| Number of fibres per tube | 8 |
| 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 mm |

Cross-section diagram



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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 % |

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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 |

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| | |
|------------------------------------|--|
| 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. |

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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 |