Excel Enbeam OM2 SWA Direct Burial Fibre Optic Cable Loose Tube 8 Core Eca Black

Item Code: 205-364

- Duct grade - rodent resistant
- Sequentially metre marked
- UV Resistant
- Cut to length service
- 25 Year system warranty
- Euroclass Eca

Product Overview

Excel steel wire (SWA) OM2 50/125µm 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 of material is then applied, a rip cord is inserted under this sheath to ease cable stripping. Lengths of steel wire armouring are then applied and an oversheath is added.

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	8
Type of tube	Loose tube
Number of fibres per tube	8
Fibre type	Multi mode 50/125
Category	OM2
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Black

Flame retardant according to IEC 60332-1-2	yes
Reaction-to-fire class according to EN 13501-6	Eca
Outer diameter approx.	10.5 mm

Cable specifications

Features		Values
Tensile Strength		3000 N
Crush Resistance		1500 N/m
Torsion		± 180 ⁰
Temperature performance	Installation	-30ºC to +70ºC
	Operation	-30ºC to +70ºC
	Storage	-30ºC to +70ºC
Loose tubes	Number	1
	Material	PBT
Loose Tube ID/OD	4-16 Cores	2.2/3.2 ± 0.1 mm
	24 Cores	2.6/3.5 ± 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
Overall Cable Diameter	4-16 Cores	10.0 ± 0.5 mm
	24 Cores	10.5 ± 0.5 mm
Cable Weight	4-16 Cores	165 ± 15 kg/km
	24 Cores	180 ± 15 kg/km
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter

Fibre specifications

Features		OM1	OM2
Attenuation	@850 nm	≤ 3.0 dB/km	≤ 2.7 dB/km
	@1300 nm	≤ 1.0 dB/km	≤ 0.8 dB/km
Bandwidth	@850 nm	≥ 200 MHz.km	≥ 500 MHz.km
	@1300 nm	≥ 600 MHz.km	≥ 550 MHz.km
Core Diameter		62.5 ± 2.5 µm	50 ± 2.5 µm
Core Cladding Concentricity Error		≤ 1 µm	≤ 1 µm
Cladding Diameter		125 ± 1 µm	125 ± 1 µm
Cladding Non-circularity		≤ 1 %	≤ 1 %
Coating Diameter (Coloured)		250 ± 15 µm	250 ± 15 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 60754-2:2011	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 µm 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
IEC 60794-1-2/F5	Generic specification – Optical fibre cable test procedures – Bending test (Method F5)
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
205-348	Excel Enbeam OM2 SWA Direct Burial Fibre Optic Cable Loose Tube 4 Core Eca Black
205-352	Excel Enbeam OM2 SWA Armoured Fibre Optic Cable Loose Tube 12 Core Eca Black
205-354	Excel Enbeam OM2 SWA Armoured Fibre Optic Cable Loose Tube 24 Core Eca Black
205-364	Excel Enbeam OM2 SWA Direct Burial Fibre Optic Cable Loose Tube 8 Core Eca Black

205-366	Excel Enbeam OM2 SWA Armoured Fibre Optic Cable Loose Tube 16 Core Eca Black