

Enbeam OM2 Multimode 50/125 4 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black

Item Code: 205-348



✕ Direct burial Rodent Resistant

✕ Sequentially Metre Marked

✕ 500/500MHz.km Bandwidth

✕ Cut to length service

✕ 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

Features	Values
Number of Cores	4
Type of tube	Loose tube
Number of fibres per tube	4
Fibre type	Multi mode 50/125
Category	OM2
Armouring	yes
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Black
Reaction-to-fire class according to EN 13501-6	Eca
Halogen free (acc. EN 60754-1/2)	yes

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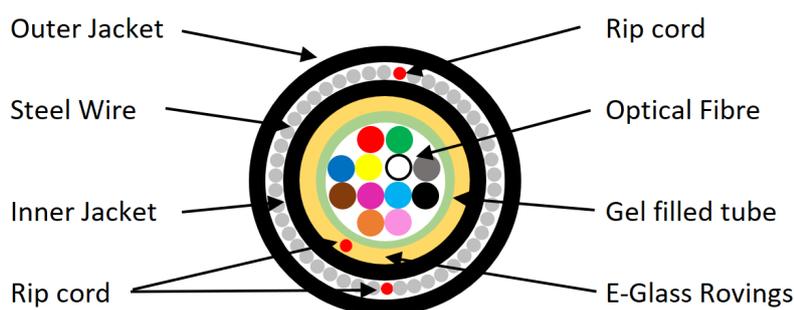
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Features	Values
Flame retardant	In accordance with EN 50399
Outer diameter approx.	10 mm

Cross-section diagram



Cable specifications

Features	Values
Strength members	E-Glass Rovings
Tensile Strength (during installation)	3000N
Tensile strength (installed)	1000N
Crush resistance (Direct Burial)	1500N
Impact	15Nm
Torsion	5 cycles +/- 1 turn
Kink	100mm
Temperature range (installation)	-30° to +70°C
Temperature range (installed)	-30° to +70°C
Temperature range (storage)	-30° to +70°C
Weight (4-16 cores)	Approx. 165 kg/km
Weight (14 cores)	Approx. 180 kg/km
Minimum bend radius (unloaded)	20x cable OD
Minimum bend radius (loaded)	10x cable OD
Tube diameter (4-16 Core)	3.2mm±0.1mm
Tube diameter (24+ Core)	3.5mm±0.1mm
Steel Wire Armouring	0.6mm soft zinc coated steel wires

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Features	Values
Sheath thickness	Typical 1.1mm
Number of ripcords	3

Fibre specifications

Features	Values
Core diameter	50±2.5um
Cladding diameter	125.0±1.0um
Primary Coating diameter	250±15um
Max. attenuation at 850nm	2.7dB/km
Max attenuation at 1300nm	0.8dB/km
Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
Numerical aperture	0.200±0.015
Bandwidth at 850nm	500 MHz.km
Bandwidth at 1300nm	500 MHz.km

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 60793-1-1:2017	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

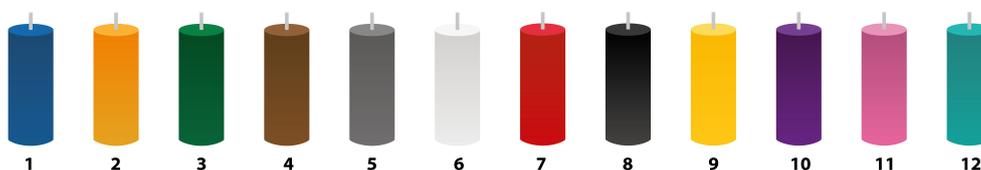
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Applicable Standard	Subject
IEC 60793-1-30:2010	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test
ITU G.651.1	Characteristics of a 50/125 µm multimode graded index optical fibre cable for the optical access network
EN 50173-1:2011	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	Restriction of Hazardous Substances - Compliant



For fibre core counts above 12 the colour sequence is repeated with the addition of a mark every 70mm for cores 13-24 and two marks for 25-36 and so on.

Part number table

Part Number	Description
205-348	Enbeam OM2 Multimode 50/125 4 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black
205-352	Enbeam OM2 Multimode 50/125 12 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black
205-354	Enbeam OM2 Multimode 50/125 24 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black
205-364	Enbeam OM2 Multimode 50/125 8 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black
205-366	Enbeam OM2 Multimode 50/125 16 Core Armoured SWA Fibre Optic Cable Loose Tube Eca - Black

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



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