Enbeam OM4 Multimode 50/125 4 Core Fibre Optic Cable Loose Tube Dca - Black



Item Code: 204-004



Product overview

Excel OM4 50/125µm loose tube optical fibre cables have been designed specifically for internal and external applications. These compact, lightweight cables are extremely flexible and are quick and easy to install.

The cables are constructed around a gel filled (non-dripping and silicon free) tube containing up to 24 colour coded 250µm primary coated fibres. This tube is covered with an E-Glass strength member.

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	OM4
Armouring	no
Rodent resistant	yes
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Black
Reaction-to-fire class according to EN 13501-6	Dca
Smoke development class according to EN 13501-6	s2
Euro class flaming droplets/particles according to EN 13501-6	d0
Euro class acidity according to EN 13501-6	a1
Halogen free (acc. EN 60754-1/2)	yes
Flame retardant	In accordance with EN 50399

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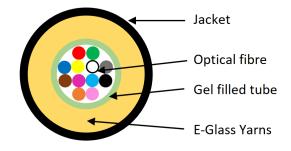
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Features	Values
Low smoke (acc. BS EN 61034-2)	yes
Outer diameter approx.	6 mm

Cross-section diagram



Cable specifications

Features	Values
Strength members	E-Glass Yarns
Tensile Strength (during installation/installed)	1000N/300N
Impact	1J
Crush resistance (during installation/installed)	1000N/300N
Torsion	5 cycles +/- 1 turn
Kink	100mm min.
Temperature range (during installation/installed)	-30° to +60°C
Temperature range (storage)	-40° to +60°C
Weight (4-16 cores)	Approx. 40kg/km
Weight (24 cores)	Approx. 45kg/km
Tube diameter (4-16 cores)	2.8mm±0.1mm
Tube diameter (24 cores)	3.5mm±0.20mm
Maximum bend radius (during installation/installed)	20x cable OD/10x cable OD
Sheath thickness	Typical 1.1mm
Water Penetration	No water on free end



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Fibre specifications

Features	Values
Core diameter	50±2.5um
Cladding diameter	125.0±1.0um
Primary Coating diameter	250±15um
Max. attenuation at 850nm	3.0 dB/km
Max attenuation at 1300nm	1.0 dB/km
Refractive Index at 850nm	1.482
Refractive Index at 1300nm	1.477
Numerical aperture	0.200±0.015
Overfilled Modal Bandwidth at 850nm	3500 MHz.km
Overfilled Modal Bandwidth at 1300nm	500 MHz.km

Standards

Applicable standard	Subject
IEC 60794-2-20:2013	Optical fibre cables - Part 2-20: Indoor cables - Family
	specification for multi-fibre optical cables
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
120 00793-1-20.2014	
	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
204-004	Enbeam OM4 Multimode 50/125 4 Core Fibre Optic Cable Loose Tube Dca - Black
204-006	Enbeam OM4 Multimode 50/125 6 Core Fibre Optic Cable Loose Tube Dca - Black
204-008	Enbeam OM4 Multimode 50/125 8 Core Fibre Optic Cable Loose Tube Dca - Black
204-012	Enbeam OM4 Multimode 50/125 12 Core Fibre Optic Cable Loose Tube Dca - Black
204-016	Enbeam OM4 Multimode 50/125 16 Core Fibre Optic Cable Loose Tube Dca - Black
204-024	Enbeam OM4 Multimode 50/125 24 Core Fibre Optic Cable Loose Tube Dca - 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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