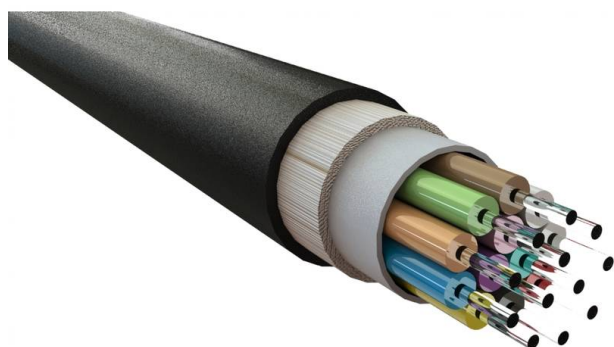


Enbeam Multimode 4-24 Core Fibre Optic Cable Loose Tube Dca - Black



✕ Duct grade rodent resistant

✕ Cut to length service

✕ Sequentially metre marked

✕ 25 Year system warranty

✕ Euroclass Dca-s2-d0-a1

Product Overview

Excel 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

Feature	Values
Number of Cores	4-24
Type of tube	Loose tube
Number of fibres per tube	4
Fibre type	Multi mode
Category	OM1
Rodent resistant	Yes
Outer sheath material	Copolymer
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	d0

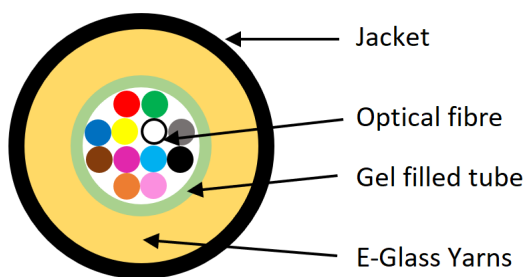
Enbeam Multimode 4-24 Core Fibre Optic Cable Loose Tube Dca - Black



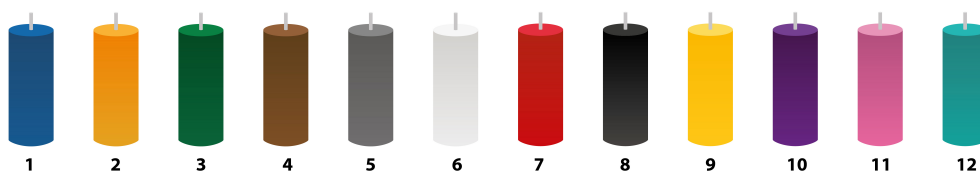
13501-6

Euro class acidity according to EN 13501-6	a1
Halogen free (acc. EN 60754-1/2)	Yes
Flame retardant	In accordance with EN 50399
Low smoke (acc. BS EN 61034-2)	Yes
Outer diameter approx.	6 mm

Cross-section diagram



Colour coding (as per TIA-598-C)



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.

Cable specifications

Features		Values
Loose Tube	Material	PBT
	Diameter	2.8±0.1mm(2-12 cores), 3.5±0.20mm(16-24 cores)
	Thickness	0.35±0.05mm
Strength Member	Material	E-glass Yarns

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Sheath	Material	LSZH
	Thickness	Typical 1.1mm
Cable Diameter	Diameter ($\pm 0.3\text{mm}$)	6.0 $\pm 0.20\text{mm}$ (2-16 cores), 6.5 $\pm 0.20\text{mm}$ (18-24 cores)
Cable Weight		Approx. 40kg/km(2-16 cores), 45kg/km(18-24 cores)
Tensile Strength	Installation	1000N
	Working	300N
Cable Impact		1J
Crush Resistance	Installation	1000N
	Working	300N
Torsion		Change of Attenuation $\leq 0.10\text{dB}$ (SM fiber)
		Change of Attenuation $\leq 0.30\text{dB}$ (MM fiber)
Temperature Range	Installation	-30°C to +60°C
	Working	-30°C to +60°C
	Storage	-40°C to +60°C
Bending Radius	Short term	20 x Diameter
	Long term	10 x Diameter
Water Penetration		No water on free end

Fibre specifications

Features	Values
Attenuation	@1310nm 3.5 dB/km(Maximum)
	@1550nm 1.5 dB/km(Maximum)
	For any 1000 metre Max. 0.2dB/km
Overfilled Modal Bandwidth	@850nm 200 MHz.km
	@1300nm 600 MHz.km
Core Diameter	62.5 $\pm 2.5\mu\text{m}$
Core Non-circularity	$\leq 5\%$
Cladding Diameter	125.0 $\pm 1.0\mu\text{m}$
Cladding Non-circularity	$\leq 5\%$

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Core - Cladding Concentricity Error		≤1.5um
Primary coating diameter - Uncolored		242±7um
Primary Coating Diameter - Colored		250±15um
Primary Coating Non-circularity		≤6%
Primary Coating - Cladding Concentricity Error		≤12um
Group Index of Refraction	@850nm	1.496
	@1300nm	1.491
Proof stress level		≥0.69(≈1% strain) Gpa
Typical Average Strip Force		1.7N
Strip force(peak)		1.3≤Fpeak.strip≤8.9N
Numerical Aperture		0.275±0.015

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 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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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
RoHS	Restriction of Hazardous Substances - Compliant
WFD	Compliant to Waste Framework Directive
SCIP	Compliant - Does Not Contain Substances of Concern in Products

Part Number Table

Part Number	Description
200-047	Enbeam OM1 Multimode 62.5/125 4 Core Fibre Optic Cable Loose Tube Dca - Black
200-060	Enbeam OM1 Multimode 62.5/125 6 Core Fibre Optic Cable Loose Tube Dca - Black
200-067	Enbeam OM1 Multimode 62.5/125 8 Core Fibre Optic Cable Loose Tube Dca - Black
200-081	Enbeam OM1 Multimode 62.5/125 16 Core Fibre Optic Cable Loose Tube Dca - Black
200-084	Enbeam OM1 Multimode 62.5/125 24 Core Fibre Optic Cable Loose Tube Dca - Black
200-087	Enbeam OM1 Multimode 62.5/125 12 Core Fibre Optic Cable Loose Tube Dca - Black

Enbeam Multimode 4-24 Core Fibre Optic Cable Loose Tube Dca - Black



200-149	Enbeam OM3 Multimode 50/125 6 Core Fibre Optic Cable Loose Tube Dca - Black
200-150	Enbeam OM3 Multimode 50/125 4 Core Fibre Optic Cable Loose Tube Dca - Black
200-151	Enbeam OM3 Multimode 50/125 8 Core Fibre Optic Cable Loose Tube Dca - Black
200-152	Enbeam OM3 Multimode 50/125 12 Core Fibre Optic Cable Loose Tube Dca - Black
200-153	Enbeam OM3 Multimode 50/125 16 Core Fibre Optic Cable Loose Tube Dca - Black
200-154	Enbeam OM3 Multimode 50/125 24 Core Fibre Optic Cable Loose Tube Dca - Black
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



E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.