INT/EXT L.Tube 12C 50/125 OM4 Multimode Fiber Optic Cable

PN: FIO20M4-12-03BK

Water & UV resistant

Tube filling
Duct Grade Rodent resist

Application
Indoor/ Outdoor

Outer Sheath Material
LSZH

Package
Wooden drum & Cut to length Service

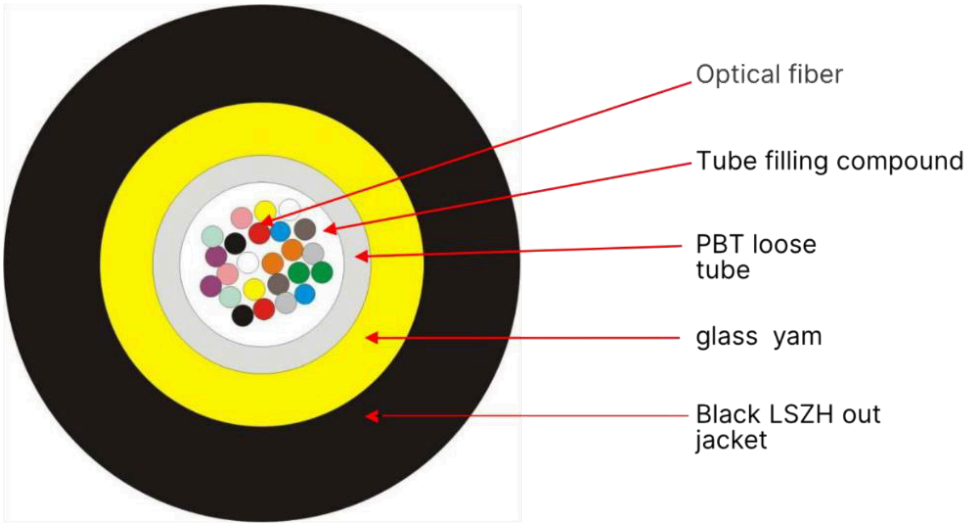
Description

The indoor/outdoor loose tube fiber optic cable is designed with 12 cores, known for their low dispersion and high bandwidth capabilities. Encased in a Low Smoke Zero Halogen (LSZH) sheathing, it ensures safety by emitting minimal smoke and no toxic halogen compounds when exposed to fire. This versatile cable is robust enough for outdoor environments yet flexible for indoor routing, making it an ideal choice for complex networking installations that require reliability and safety.

Spacifications

Feature	Value
Number of Cores	12C
Type of tube	PBT
Number of fibres per tube	12
Fibre type	Multimode 50/125
Category	OM4
Sequentially meter marked	Yes
Duct Grade	Yes
Rodent resistant	Yes
Outer sheath material	LSZH
Outer sheath colour	Black
Armoured	No
Flame retardant according to IEC 60332-1-2	Yes
Low smoke (acc. IEC 61034-2)	Yes
Reaction-to-fire Euro class according to EN 13501-6	Eca
Outer diameter approx.	6nm

Drawing



Cable Spacifications

Feature		Value
Tensile Strength	Installation	1000N
	Working	400N
Crush Resistance	Installation	500N
	Working	200N
Torsion		±180°±°
Temperature performance	Installation	-40 to 70°C
	Operation	-40 to 70°C
	Storgae	-40 to 70°C
Loose Tubes	Number	1
	Material	PBT
Outer Sheath	Thickness	1,1mm
	Material	LSZH
Ripcord	Number	1
	Material	Kevlar
Overall Cable Diameter		6mm
Cable Weight		40kg/km
Drum Size		630*630mm
Drum weight		25kg
Water penetration		Yes

Fiber Spacifications

Feature		Value
Bending Radius	Short Term	20D x diameter
	Long Term	10D x diameter
Attenuation	MM @850nm	≤2.5 dB/km
	MM @1300nm	≤0.8 dB/km
Bandwidth	MM @850nm	≥1500 MHz/km
	MM @1300nm	≥500 MHz/km
Core Diameter		50±2.5 μm

Core Cladding Concentricity Error	≤1.5 μm
Cladding Diameter	125±1μm
Cladding non-circularity	≤1.0%
Coating Diameter (coloured)	245±7μm
Proof Stress Level	0,69Gpa

Standards

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 60793-1-1:2022	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
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

Apparence and packaging

1. No damage on the surface, no trachoma.
2. Wooden tray packaging; wood whole seal packaging
3. Segment length: no less than 2000M. The segment length of each tray of the same batch shall be similar as much as possible. Other lengths can be agreed upon through consultation.
4. Report certificate: It includes optical cable inspection number, optical cable type, core number, optical fiber type, length, etc
5. 2000m Wooden drum with details:
   - Report Certificate and number
   - Part Number
   - Description
   - Fibre optic type
   - Number of cores
   - Cable structure
   - Total Length

6. Each drum is factory tested and certified
7. Specific lengths longer than 2000m might not be in stock but can be ordered
8. Specific lengths shorter than 2000m can be ordered and pre-cut to length. Off-cuts can be also wound on a separate reel if requested.

Related Products

Part Number	Description	Value
FIO2S5-12-03	**INT/EXT L.TUBE FO 12C 9/125 Singlemode Fiber Optic Cable** https://flaaxcables.com/go/int-ext-foc-pn-fio2s5-xx-03	
FIO2S5-24-03	**INT/EXT L.TUBE FO 24C 9/125 Singlemode Fiber Optic Cable** https://flaaxcables.com/go/int-ext-foc-pn-fio2s5-xx-03	
FIO2M3-24-03BK	**FlaaxINT/EXT L.Tube 24C 50/125 OM3 Multimode Fiber Optic Cable** https://flaaxcables.com/go/int-ext-foc-pn-fio2m3-24-03bk	
F2-1-1M3-2	**Flaax FO Pigtail LC OM3 0.9mm 2m** https://flaaxcables.com/go/flaax-fo-pigtail-lc-om3-09mm-2m	
F1-11-112M3-05	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 0.5m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	
F1-11-112M3-1	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 1m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	
F1-11-112M3-2	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 2m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	
F1-11-112M3-3	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 3m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	
F1-11-112M3-5	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 5m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	
F1-11-112M3-10	**Flaax Fiber Optic Patch Cord LC/UPC - LC/UPC OM3 Duplex 2.0mm 10m** https://flaaxcables.com/go/fiber-optic-patch-cord-lc/upc-lc/upc	

Flaax is offering a robust selection of passive networking equipment designed to build reliable and scalable infrastructures. Our products are engineered for excellence, ensuring seamless connectivity and long-term performance for businesses and individuals alike.