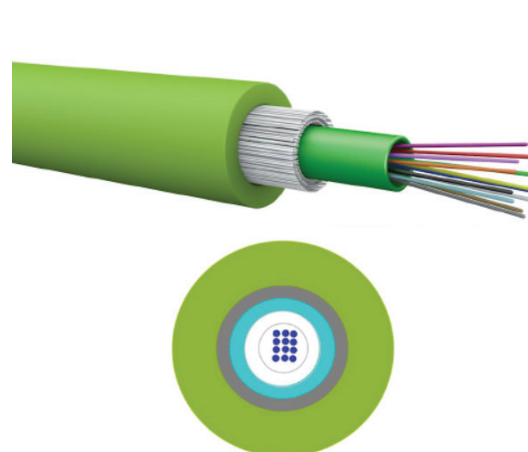


# Fiber Optic Distribution Cable, Indoor/Outdoor Non-Metallic Gel Filled Loose Tube, LS0H, B2ca-s1a,d1,a1 >

Molex LS0H central loose tube fiber cable can be used for LAN and WAN applications. Non-metallic rodent-proof Unitube cable with gel-filled tubes and water-blocked design, making it well suited for indoors on trays and in ducts, and limited outdoor use in ducts. The cable jacket is made of halogen-free, flame-retardant and UV stabilized material. LS0H EuroClass B2ca,s1a,d1,a1 sheath.



## SPECIFICATIONS

### Commercial Standards

#### Fiber:

##### OS2:

IEC 60793-2-50 Category B.1.3  
ISO/IEC 11801-1/3:2017, cat. OS2,OS1a, OS1  
ITU Recommendation G.652.D and C, B, A  
IEEE 802.3 – 2012  
EN 50173-1:2018, cat. OS2 and OS1

##### OM3:

IEC 60793-2-10:2019 Category A1-OM3; EN 50173:2018 category OM3  
EN 60793-2-10: type A1a.2 ISO/IEC 11801:2017 category OM3 ITU  
Recommendation G.651 IEEE 802.3 - 2002 incl. amendment 802.3ae -  
2002. TIA/EIA-492 AAAC

##### OM4

IEC 60793-2-10:2019 Category A1-OM4 EN 50173:2018 category OM4,  
ISO/IEC 11801:2017. category OM4 TIA/EIA-492 AAAD IEEE 802.3 -  
2002. incl. amendment 802.3ae – 2002

##### OM5

IEC 60793-2-10:2019 Category A1-OM5 EN 50173:2018 category OM5,  
ISO/IEC 11801:2017. category OM5 TIA/EIA-492 AAAE IEEE 802.3 - 2002.  
incl. amendment 802.3ae – 2002

#### Cable:

ISO 11801-1, EN 50173-1, IEC 60794-1  
RoHS Compliant

EU Regulation 305/2011 (CPR)

EN 50575:2014+A:2016

EuroClass: B2ca,s1a,d1,a1

DoP: MLXCES-2023-F-001 located on web:

<https://www.molexces.com/about-us/dop-certificates/>

### Electrical

#### Fiber&Cable Attenuation IEC 60793-1-40

##### OS2

Maximum value of cable attenuation at 1625 nm:  $\leq 0.25$  dB/km  
Maximum value of cable attenuation at 1550 nm:  $\leq 0.23$  dB/km  
Maximum value of cable attenuation at 1310 nm:  $\leq 0.38$  dB/km

##### OM3&OM4

Maximum value of cable attenuation at 850 nm  $\leq 3.0$  dB/km  
Maximum value of cable attenuation at 1300 nm  $\leq 1.0$  dB/km  
Bare Fiber Attenuation Limit to IEC 60793-1-40,  
850 nm  $\leq 2.5$  dB/km  
1300 nm  $\leq 0.8$  dB/km

##### OM5

Maximum value of cable attenuation at 850 nm:  $\leq 3.0$  dB/km  
Maximum value of cable attenuation at 953 nm:  $\leq 2.3$  dB/km  
Maximum value of cable attenuation at 1300 nm:  $\leq 1.0$  dB/km  
Bare Fiber Attenuation Limit to IEC 60793-1-40,  
850 nm:  $\leq 2.5$  dB/km  
953 nm:  $\leq 1.8$  dB/km  
1300 nm:  $\leq 0.7$  dB/km

[www.molex.com/products/fiber/cables/](http://www.molex.com/products/fiber/cables/)

# Fiber Optic Distribution Cable, Indoor/Outdoor Non-Metallic Gel Filled Loose Tube, LSOH, B2ca-s1a,d1,a1 >

## SPECIFICATIONS (CONT.)

### Group index of refraction IEC 60793-1-22

#### OS2

Group index of refraction at 1310 nm: 1.467

Group index of refraction at 1550 nm: 1.467

Group index of refraction at 1625 nm: 1.468

#### OM3,OM4&OM5:

Group index of refraction at 850 nm: 1.482

Group index of refraction at 1300 nm: 1.477

### Bandwidth (IEC 60793-1-41)

#### OM3

Overfilled (OFL) modal bandwidth at 850 nm:  $\geq 1500$  MHz • km

Overfilled (OFL) modal bandwidth at 1300 nm:  $\geq 500$  MHz • km

Effective Modal Bandwidth (EMB) at 850 nm (IEC 60793-1-49):  $\geq 2000$  MHz • km

#### OM4

Overfilled (OFL) modal bandwidth at 850 nm:  $\geq 3500$  MHz • km

Overfilled (OFL) modal bandwidth at 1300 nm:  $\geq 500$  MHz • km

Effective Modal Bandwidth (EMB) at 850 nm (IEC 60793-1-49):  $\geq 4700$  MHz • km

#### OM5

Overfilled (OFL) modal bandwidth at 850 nm:  $\geq 3500$  MHz • km

Overfilled (OFL) modal bandwidth at 953 nm:  $\geq 1850$  MHz • km

Overfilled (OFL) modal bandwidth at 1300 nm:  $\geq 500$  MHz • km

Effective Modal Bandwidth (EMB) at 850 nm (IEC 60793-1-49):  $\geq 4700$  MHz • km

## Mechanical Characteristics

**Loose Tube:** Gel-filled loose tube  $\varnothing 2.8$ mm for 2F up to 24F

**Strength member:** Glass yarns

**Sheath:** 1.5mm LSOH, UV stabilized

#### Sheath Color:

OS2 Yellow, RAL 1018

OM3 Aqua, RAL 6027

OM4 Erika-Violet, RAL 4003

OM5 Lime-Green, RAL 6039

## Physical Properties IEC 60794-1-21/22

Attribute	Method	Limits
Nominal Outer Diameter	N/A	2-24 fibers: 7.5mm
Nominal weight	N/A	2-24 fibers: 73kg/km
Max installation tensile strength	E1	3000N
Permanent tensile strength	E1	1000N
Compressive Strength	E3	3000N/100mm
Torsion	E7	5 cycles +/- 1 turn
Min bend radius loaded	E11	R = 75mm
Temperature Range	F1	Operation: -40°C to +70° C, Storage: -30°C to +60°C Max attenuation variation at operational temperature range: MM = 0.5 dB/km SM = 0.2 dB/km

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# Fiber Optic Distribution Cable, Indoor/Outdoor Non-Metallic Gel Filled Loose Tube, LS0H, B2ca-s1a,d1,a1 >

## ORDERING INFORMATION

Order No.	SAP No.	Description
CFR-00831	183150168	Optical Fiber Cable 4F Non-Metallic Unitube LS0H OS2 B2ca-s1a,d1,a1 - Yellow
CFR-00832	183150169	Optical Fiber Cable 6F Non-Metallic Unitube LS0H OS2 B2ca-s1a,d1,a1 - Yellow
CFR-00833	183150170	Optical Fiber Cable 8F Non-Metallic Unitube LS0H OS2 B2ca-s1a,d1,a1 - Yellow
CFR-00834	183150171	Optical Fiber Cable 12F Non-Metallic Unitube LS0H OS2 B2ca-s1a,d1,a1 - Yellow
CFR-00835	183150172	Optical Fiber Cable 24F Non-Metallic Unitube LS0H OS2 B2ca-s1a,d1,a1 - Yellow
CFR-00836	183150173	Optical Fiber Cable 4F Non-Metallic Unitube LS0H OM3 B2ca-s1a,d1,a1 - Aqua
CFR-00837	183150174	Optical Fiber Cable 6F Non-Metallic Unitube LS0H OM3 B2ca-s1a,d1,a1 - Aqua
CFR-00838	183150175	Optical Fiber Cable 8F Non-Metallic Unitube LS0H OM3 B2ca-s1a,d1,a1 - Aqua
CFR-00839	183150176	Optical Fiber Cable 12F Non-Metallic Unitube LS0H OM3 B2ca-s1a,d1,a1 - Aqua
CFR-00840	183150177	Optical Fiber Cable 24F Non-Metallic Unitube LS0H OM3 B2ca-s1a,d1,a1 - Aqua
CFR-00841	183150178	Optical Fiber Cable 4F Non-Metallic Unitube LS0H OM4 B2ca-s1a,d1,a1 - Erika Violet
CFR-00842	183150179	Optical Fiber Cable 6F Non-Metallic Unitube LS0H OM4 B2ca-s1a,d1,a1 - Erika Violet
CFR-00843	183150180	Optical Fiber Cable 8F Non-Metallic Unitube LS0H OM4 B2ca-s1a,d1,a1 - Erika Violet
CFR-00844	183150181	Optical Fiber Cable 12F Non-Metallic Unitube LS0H OM4 B2ca-s1a,d1,a1 - Erika Violet
CFR-00845	183150182	Optical Fiber Cable 24F Non-Metallic Unitube LS0H OM4 B2ca-s1a,d1,a1 - Erika Violet
CFR-00846	183150183	Optical Fiber Cable 4F Non-Metallic Unitube LS0H OM5 B2ca-s1a,d1,a1 - Lime Green
CFR-00847	183150184	Optical Fiber Cable 6F Non-Metallic Unitube LS0H OM5 B2ca-s1a,d1,a1 - Lime Green
CFR-00848	183150185	Optical Fiber Cable 8F Non-Metallic Unitube LS0H OM5 B2ca-s1a,d1,a1 - Lime Green
CFR-00849	183150186	Optical Fiber Cable 12F Non-Metallic Unitube LS0H OM5 B2ca-s1a,d1,a1 - Lime Green
CFR-00850	183150187	Optical Fiber Cable 24F Non-Metallic Unitube LS0H OM5 B2ca-s1a,d1,a1 - Lime Green

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