

# Fiber Optic Cable Indoor/ Outdoor, LSOH, Light Duty >

The cable consists of a number of 900µm tight buffered optical fibers reinforced with aramid yarns and sheathed in a flame retardant Low Smoke Zero Halogen compound.

Indoor/Outdoor cable is designed for internal or outdoor use primarily in structured wiring systems in backbones and/or inter-building. It also features a “dry” water blocking system to prevent the flow of water along the cable in the event of sheath breach.

## OM3

Graded Index 50/125um fiber is proven to satisfy Gigabit, 10Gigabit, 40Gigabit and 100Gigabit Ethernet applications.

It will support the following link lengths:

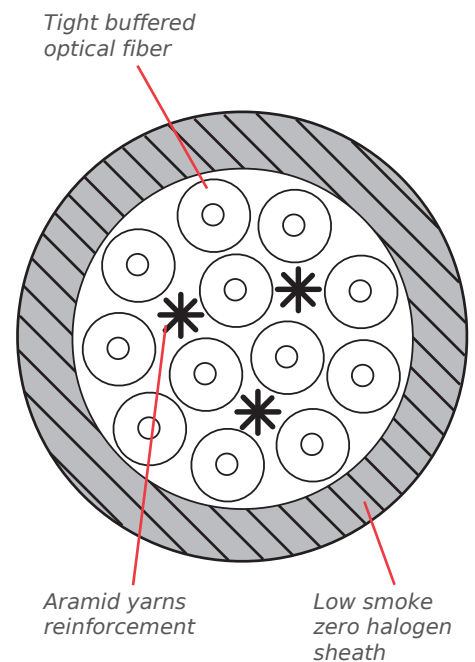
1 Gigabit: 1,000m at 850nm  
 10 Gigabit: 300m at 850nm  
 40 Gigabit: 100-300m at 850nm  
 100 Gigabit 70-200m at 850nm

## OM4

Graded Index 50/125um fiber is proven to satisfy Gigabit, 10Gigabit, 40Gigabit (40GBASE-SR4) and 100Gigabit (100GBASE-SR10) Ethernet applications.

It will support the following link lengths:

1 Gigabit: 1,100m at 850nm  
 10 Gigabit: 550m at 850nm  
 40 Gigabit: 150-300m at 850nm  
 100 Gigabit 100-300m at 850nm



## FEATURES AND ADVANTAGES

Low smoke zero halogen (LSOH/LSZH) sheath

OFNR riser rated

900µm tight buffered

Internal/duct grade

Aramid yarn strength member

Fibers compliant to ISO/IEC 11801 fiber specifications

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

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## SPECIFICATIONS

### Reference information

#### Commercial Standards:

##### OM1

ISO/IEC 11801:2002 - 2nd Edition, Type OM1; AS/ACIF S008; AS/NZS 3080:2003

##### OM2

ISO/IEC 11801:2002 - 2nd Edition, Type OM2; IEC 60332-1; AS/ACIF S008; AS/NZS 3080:2003  
EIA/TIA 568-C.3

##### OM3

ISO/IEC 11801:2002 - 2nd Edition, Type OM3; AS/ACIF S008; AS/NZS 3080:2003, IEE 802.3ba

##### OM4

ISO/IEC 11801:2002 - 2nd Edition, Type OM3; AS/ACIF S008; AS/NZS 3080:2003, IEE 802.3ba

##### OS2

ISO/IEC 11801:2002 - 2nd Edition, Type OS2; AS/ACIF S008; AS/NZS 3080:2003

### Mechanical

#### Construction details

**Fiber Identification:** Color Coded

**Fiber Insulation:** Colored LSZH

**Reinforcing:** Aramid Yarns

**Sheath:** LSOH

### Physical

**Max. Tensile Strength-Short Term:** 0.6kN

**Operating temp range:** -10°C to +60°C

**Crush Resistance-Short Term:** 1.0 kN/100mm

#### OM1

**Core Diameter:** 62.5±3.0µm

**Cladding Diameter:** 125±1.0µm

#### OM2

**Core Diameter:** 50±3.0µm

**Cladding Diameter:** 125±1.0µm

#### OM3/OM4

**Core Diameter:** 50±2.5µm

**Cladding Diameter:** 125±2.0µm

#### Min G-Ethernet Transmission

**Distance at 850/1300nm:** 970/600m

#### OS2

**Mode Field Diameter @ 1310:** 9.2±0.4µm

**Cladding Diameter:** 125±1.0µm

### Dimensions & Mass

Core count	Diameter (nominal) (mm)	Mass (nominal) (kg/km)	Min bending radius (full load) (mm)
2	4.8	27	85
4	4.8	27	85
6	5.6	38	105
8	6.0	42	110
12	6.7	50	125

### Electrical/Optical

#### OM1

##### Max. Attenuation

At 850 nm: 3.5 dB/km

At 1300 nm: 1.0 dB/km

##### Min. Bandwidth

At 850 nm: 200 MHz/km

At 1300 nm: 500 MHz/km

#### OM2

##### Max. Attenuation

At 850 nm: 3.2 dB/km

At 1300 nm: 0.9 dB/km

##### Min. Bandwidth

At 850 nm: 550 MHz/km

At 1300 nm: 600 MHz/km

#### OM3

##### Max. Attenuation

At 850 nm: 2.5 dB/km

At 1300 nm: 0.7 dB/km

##### Min. Bandwidth

At 850 nm: 2000 MHz/km

At 1300 nm: 500 MHz/km

#### OM4

##### Max. Attenuation

At 850 nm: 2.5 dB/km

At 1300 nm: 0.7 dB/km

##### Min. Bandwidth

At 850 nm: 4700 MHz/km

At 1300 nm: 500 MHz/km

#### OS2

##### Max. Attenuation

At 1310 nm: 0.4 dB/km

At 1550 nm: 0.3 dB/km

##### Max. Average Attenuation

At 1310 nm: 0.35 dB/km

At 1550 nm: 0.21 dB/km

##### Attenuation Discontinuity:

Both Windows < 0.10dB

##### Numerical Aperture: 0.14

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## ORDERING INFORMATION

Order No.	SAP No.	Description
AFOIZ004OM1	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 62.5/125µm, OM1
AFOIZ006OM1	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 62.5/125µm, OM1
AFOIZ008OM1	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 62.5/125µm, OM1
AFOIZ012OM1	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 62.5/125µm, OM1
AFOIZ024OM1	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 62.5/125µm, OM1
AFOIZ004OM2	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM2
AFOIZ006OM2	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM2
AFOIZ008OM2	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM2
AFOIZ012OM2	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM2
AFOIZ024OM2	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM2
AFOIZ004OM3	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM3
AFOIZ006OM3	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM3
AFOIZ008OM3	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM3
AFOIZ012OM3	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM3
AFOIZ024OM3	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM3
AFOIZ004OM4	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM4
AFOIZ006OM4	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM4
AFOIZ008OM4	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM4
AFOIZ012OM4	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM4
AFOIZ024OM4	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM4
AFOIZ004OM5	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM5
AFOIZ006OM5	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM5
AFOIZ008OM5	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM5
AFOIZ012OM5	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM5
AFOIZ024OM5	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 50/125µm, OM5
AFOIZ004OS2	Consult Molex	Fiber Optic Cable, 4 Core, Indoor/Outdoor Riser, LSOH, 9/125µm, OS2
AFOIZ006OS2	Consult Molex	Fiber Optic Cable, 6 Core, Indoor/Outdoor Riser, LSOH, 9/125µm, OS2
AFOIZ008OS2	Consult Molex	Fiber Optic Cable, 8 Core, Indoor/Outdoor Riser, LSOH, 9/125µm, OS2
AFOIZ012OS2	Consult Molex	Fiber Optic Cable, 12 Core, Indoor/Outdoor Riser, LSOH, 9/125µm, OS2
AFOIZ024OS2	Consult Molex	Fiber Optic Cable, 24 Core, Indoor/Outdoor Riser, LSOH, 9/125µm, OS2

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