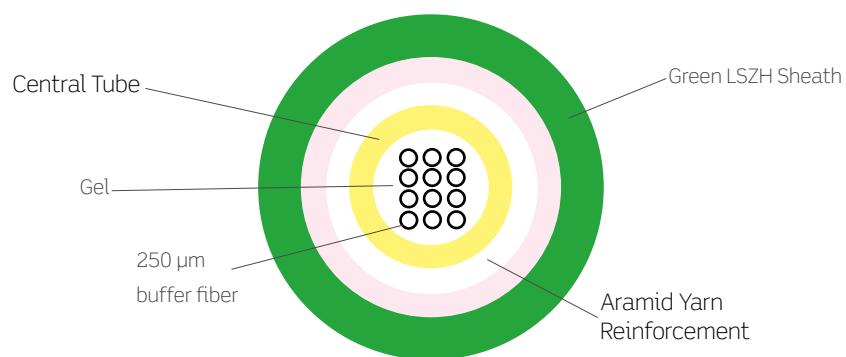


# FIBER CABLES | 2-24 Indoor/Outdoor Central Loose Tube LSZH Fiber Cable

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## APPLICATION

LAN backbones  
Telecom access lines  
Campus networks

## STANDARDS COMPLIANCE

EN 50173-1:2002, IEC 60794-1, ISO 11801 2nd edition  
ITU G.652.A/B/C/D for SM (low water peak)  
ITU G.657.A/B for SM (enhanced bend insensitive)

## CONSTRUCTION

Loose Tube	ø2.8 mm jelly filled loose tube with 2-16 fibers; ø3.5 mm loose tube with 24 fibers
Strength member	Waterblocked E-Glass fiber elements
Armoring	1.5 mm green FireBur sheath, UV stabilized, IEC 50290-2-27

## FIRE RATING

IEC 60332-1-2	Single vertical wire test
IEC 60754-1	No halogens
IEC 60754-2	No acid matters
IEC 61034-2	No dense smoke

## PHYSICAL PROPERTIES

Nominal outer diameter	2-16 fibers: 7.5 mm 24 fibers: 8.0 mm
Nominal weight	24 fibers: 8.0 mm 2-16 fibers: 55 kg/km
Maximum installation tensile strength	1500 N (fiber strain less than 1/2 of proof test level)
Short term tensile strength	1000 N (fiber strain less than 1/3 of proof test level)
Permanent tensile strength	700 N (no attenuation change, fiber strain less than 1/4 of proof test level)
Compressive strength (crush)	2000 N
Impact	20 Nm (no attenuation change, no broken cable elements)
Torsion	5 cycles +/- 1 turn
Kink	The cables do not form a kink when a loop is drawn together to a diameter of 200 mm
Min. bending radius, unloaded	R=60 mm
Min. bending radius, loaded	R=110 mm
Temperature	Storage: -40 °C to 60 °C (short term up to 70 °C) Installation: -15 °C to 40 °C Operation: -30 °C to 70 °C
Water penetration	No water on free end

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## TRANSMISSION CHARACTERISTICS

### 50/125 µm OM2 MULTIMODE

#### Attenuation (of cable with fibers)

Maximum value of cable at 850 nm	< 2.7 dB/km
Maximum value of cable at 1300 nm	< 0.8 dB/km
Typical value at 850 nm	< 2.5 dB/km
Typical value at 1300 nm	< 0.6 dB/km
Inhomogeneity of OTDR trace for any two 1000 meter fiber lengths	Max. 0.2 dB/km

#### Bandwidth

850 nm	600 MHz • km
1300 nm	1200 MHz • km
Group index of refraction at 850 nm	1.482
Group index of refraction at 1300 nm	1.477

### 50/125 µm

### OM3 MULTIMODE

### OM4 MULTIMODE

#### Attenuation

Maximum value of cable at 850 nm	< 3.0 dB/km	< 2.3 dB/km
Maximum value of cable at 1300 nm	< 1.0 dB/km	< 0.6 dB/km
Maximum value of fiber (for reference only) at 850 nm	< 2.5 dB/km	< 2.1 dB/km
Maximum value of fiber (for reference only) at 1300 nm	< 0.7 dB/km	< 0.4 dB/km
Inhomogeneity of OTDR trace for any two 1000 meter fiber lengths	Max. 0.1 dB/km	Max. 0.1 dB/km

#### Bandwidth

OFL value at 850 nm	< 1500 MHz • km	< 3500 MHz • km
OFL value at 1300 nm	< 500 MHz • km	< 500 MHz • km
Effective Modal Bandwidth (EMB) Effective Modal Bandwidth	< 2000 MHz • km	< 4,700 MHz • km
Group index of refraction at 850 nm	1.482	1.482
Group index of refraction at 1300 nm	1.477	1.477

### 9/125 µm OS1/OS2 SINGLE-MODE

#### Attenuation

1310 nm -1625 nm	< 0.39 dB/km
1550 nm	< 0.25 dB/km
Inhomogeneity of OTDR trace for any two 1000 meter fiber lengths	Max. 0.1 dB/km

#### Bandwidth

Group index of refraction at 1310 nm	1.467
Group index of refraction at 1550 nm	1.468
Group index of refraction at 1625 nm	1.468

## PART NUMBERS

DESCRIPTION	PART NO.
50/125 µm (OM2) Multimode Indoor/Outdoor Loose LSZH Cable	50LRZ-yy1
50/125 µm (OM3) Multimode Indoor/Outdoor Loose LSZH Cable	5LLRZ-yy1
50/125 µm (OM4) Multimode Indoor/Outdoor Loose LSZH Cable	55LRZ-yy1
9/125 µm (OS1/OS2) Single-Mode Indoor/Outdoor Loose LSZH Cable	SMLRZ-yy1

yy= fiber count: (02) 2 fibers; (04) 4 fibers; (06) 6 fibers; (08) 8 fibers; (12) 12 fibers; (16) 16 fibers; (24) 24 fibers

Note: All packaging is 1,000 meter drum reel. Other lengths available upon request.

62.5/125 µm (OM1) multimode cable is available upon request.

Fiber count higher than 24 available upon request



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