LSZH™ Ribbon Indoor/Outdoor, Gel-Filled Cables



Features and Benefits

Precise fiber and ribbon geometries Excellent mass splicing yields

Ribbon ID numbers and fiber colors Easily identifiable

Available with interlocking armor Additional mechanical durability

Common installations

Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770

Standards

Listings National Electrical Code® (NEC®) OFN-LS

Design and Test Criteria ANSI/ICEA S-83-696, CSA FT-4-ST1

Corning LSZH™ ribbon cables are designed for indoor/ outdoor application where limited-smoke and zero-halogen requirements exist. These cables are organized with 12-fiber ribbons inside a central tube that are surrounded by dielectric strength members and a specially formulated flame-retardant outer jacket. The 12-fiber ribbons have readily identifiable ribbon ID numbers and fiber colors that allow for easy access to individual fibers. The precise fiber and ribbon geometries result in excellent mass splicing yields.

The cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. Contact Customer Care at 1-800-743-2675 to order other color options.





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Specifications

Temperature Range			
Storage	-40 °C to 70 °C (-40 °F to 158 °F)		
Installation	-30 °C to 60 °C (-22 °F to 140 °F)		
Operation	-40 °C to 70 °C (-40 °F to 158 °F)		

^{*} Note: Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Mechanical Characteristics Cable		
Max. Tensile Strength, Short-Term	2700 N (600 lbf)	
Max. Tensile Strength, Long-Term	400 N (90 lbf)	

Fiber Count	Buffer Tube Dia- meter	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
12 - 36	8.1 mm	12.0 mm	146 mm	97 mm	147.71 kg/km
	(0.32 in)	(0.47 in)	(5.7 in)	(3.8 in)	(99.2 lb/1000 ft)
48 - 72	8.1 mm	13.4 mm	186 mm	124 mm	174.19 kg/km
	(0.32 in)	(0.53 in)	(7.3 in)	(4.9 in)	(117.0 lb/1000 ft)
96	8.1 mm	14.0 mm	228 mm	152 mm	196 kg/km
	(0.32 in)	(0.55 in)	(9.0 in)	(6.0 in)	(131.7 lb/1000 ft)
144 - 216	11 mm	17.0 mm	228 mm	152 mm	295.34 kg/km
	(0.43 in)	(0.67 in)	(9.0 in)	(6.0 in)	(198.4 lb/1000 ft)

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Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

Transmission Performance

Multimode					
Fiber Core Diameter (µm)	62.5	50	50	50	50
Fiber Category	OM1	OM2	ОМЗ	OM4	OM4 Extended Distance
Fiber Code	K	Т	Т	Т	Т
Performance Option Code	30	31	80	90	91
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-	600/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-	5350/-

- * 50 µm multimode fiber (OM3/OM4) meets 0.75 ns optical skew when used in all Corning Plug & Play™/EDGE™ systems solutions.
 * 50 µm multimode fiber (OM4) T90 10 Gigabit Ethernet distance assumes 1.0 dB maximum total connector/splice loss.
 * 50 µm multimode fiber (OM4) T91 10 Gigabit Ethernet Distance assumes 0.7 dB maximum total connector/splice loss.

- 1) Improved attenuation and bandwidth options available.
- 2) Bend-insensitive single-mode fibers available on request.
- 3) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
- 4) Contact a Corning Customer Care Representative for additional information.

Single-mode			
Fiber Name	Single-mode (OS2)	SMF-28® Ultra fiber	
Fiber Category	G.652.D	G.657.A1	
Fiber Code	E	Z	
Performance Option Code	01	01	
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	
Maximum Attenuation (dB/km)	0.4/0.4/0.3	0.4/0.4/0.3	
Typical Attenuation* (dB/km)	-	0.33/0.33/0.19	

^{*} For more information on typical attenuation please see the Corning whitepaper at http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/ LAN-1863-AEN.pdf



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Ordering Information | Note: Contact Customer Care at 1-800-743-2675 for other options.



1 Select fiber count.

Standard offerings:

012 036 072 144 024 048 096 216

2 Select fiber code.

 $K = 62.5 \mu m \text{ multimode (OM1)}$

T = 50 μ m multimode, (OM2/OM3/OM4/OM4+)

E = Single-mode (OS2) SMF-28e+®

Z = Single-mode (OS2) SMF-28® Ultra fiber

3 Defines cable type. C = Ribbon Cable Defines outer jacket.Z = LSZH

Defines fiber placement. 1 = 12 fibers/buffer tube

(standard)

6 Defines length markings. 4 = Markings in ft (standard)

7 Defines tensile strength.1 = See Specifications

Select performance option code.

 $30 = 62.5 \mu m \text{ multimode (OM1)}$

 $31 = 50 \mu m \text{ multimode (OM2)}$

 $80 = 50 \mu m \text{ multimode (OM3)}$

 $90 = 50 \mu m \text{ multimode (OM4)}$

91 = 50 μ m multimode (OM4+)

01 = Single-mode (OS2)
(Max. attenuation 0.4/0.4/0.3 dB/km)

Defines cable type.

- = Gel-Filled Ribbon Cable

Defines special manufacturing code.

20 = Standard

Note: Use with ribbon fan-out kits for direct connectorization application.



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

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