Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket, Rodent-Resistant Cables, 12-288 Fibers

CORNING

Features and Benefits

Low-smoke, zero-halogen sheath
Key life-safety benefit

Meets cyclic impact and chemical resistance test
Superior performance

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

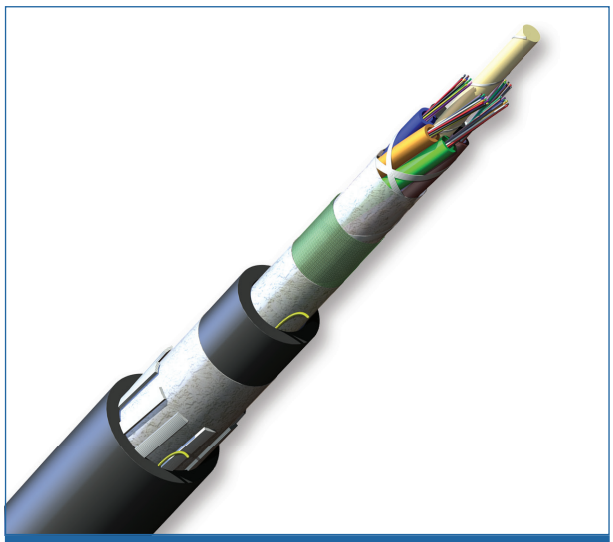
Standards

Listings	National Electrical Code® (NEC®) OFN-LS, Sunlight Resistant (SUN RES); IEEE-1202 flame test; IEC 60332-3, IEC 60754-2, IEC 61034; MSHA 30 CFR Part 7-K, Section 7.408
Design and Test Criteria	ANSI/ICEA S-104-696; UL 13; UL 444; UL 1277; UL 1666; CSA C22.2 No. 230 and No. 232; CSA OFC (FT-4-S1)

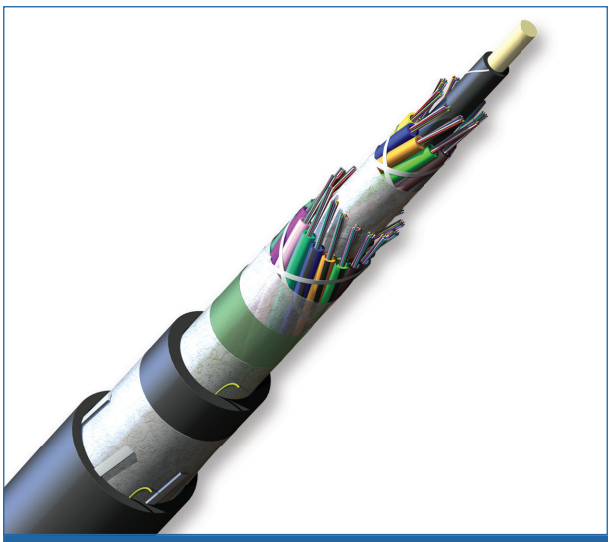
Corning LSZH™ industrial rodent-resistant cables are designed for industrial building backbones and harsh environments atypical of traditional datacom systems. Based on proven stranded loose tube cable designs, these tray-rated industrial cables are flame-retardant and have been tested to meet mechanical/environmental conditions exceeding the requirements set for traditional datacom cables. When tested to specified “tray” application requirements, these cables have demonstrated superior performance levels for compressive loading, cyclic impact and chemical resistance. The 250 µm color-coded individual fibers offer quick and easy identification during installation, with 50 µm, 62.5 µm and single-mode versions available. A key benefit of the Corning industrial cables is the low-smoke/zero-halogen (LSZH) sheath.

Corning LSZH™ industrial cables provide life-safety benefits for industrial applications through the cables’ construction. Many traditional data communication cables contain halogens in the jacket compound, which pose little risk in the controlled and protected environment of typical building air spaces, such as behind walls, under floors and in conduit.

However, cables deployed in industrial applications, particularly on the plant floor, are typically exposed to greater risk of fire, extreme temperatures or chemical exposure. This often makes halogen cables inappropriate for industrial environments. When cables containing halogens ignite, they emit highly reactive gases that can be harmful if inhaled. When halogens combine with water, acids are formed. These acids damage both living tissue



LSZH Loose Tube, Gel-Free, Double-Jacket Cables, 48-Fibers | Photo PIM0744



LSZH Loose Tube, Gel-Free, Double-Jacket Cables, 288-Fibers | Photo PIM0751

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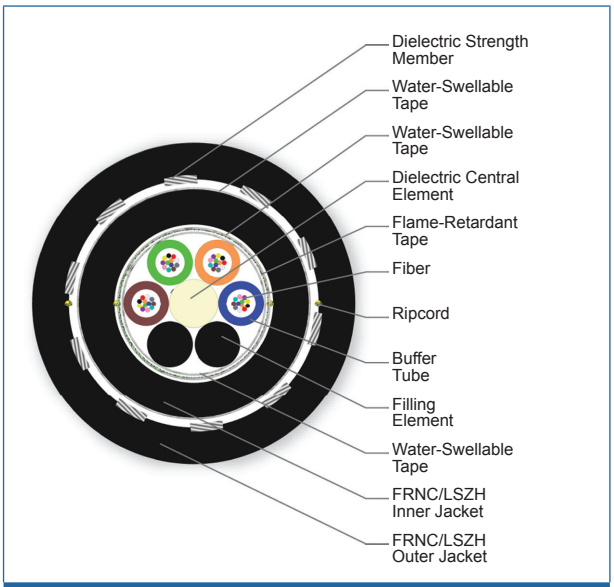
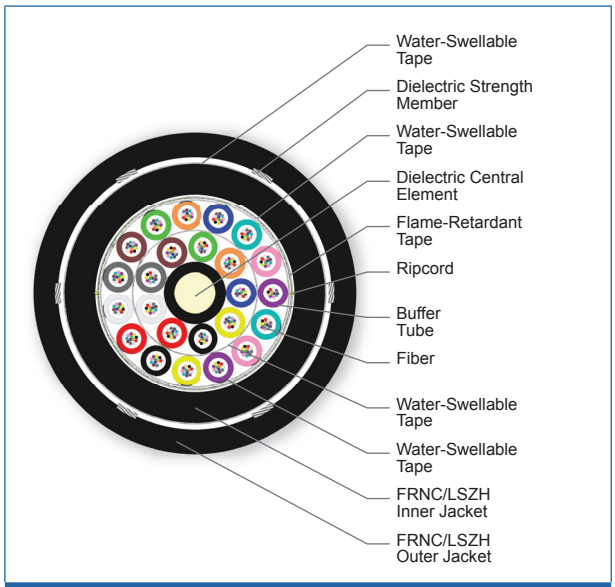
and inorganic materials, such as metal and electronic equipment. Corning LSZH industrial cables eliminate these risks in the event of a fire in the industrial environment. In addition, the LSZH compound does not drip when superheated; the material burns to ash, eliminating the onset of secondary fires.

Note: This 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 while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer



LSZH Loose Tube, Gel-Free, Double-Jacket Cables, 48-Fibers | Photo PIM1643



LSZH Loose Tube, Gel-Free, Double-Jacket Cables, 288-Fibers | Photo PIM1650

Specifications

Temperature Range	
Storage Temperature	-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 indoor/outdoor cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.*

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Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	4500 N (1000 lbf)
Max. Tensile Strength, Long-Term	1500 N (333 lbf)

Fiber Count	Buffer Tube Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
12 - 72	2.5 mm (0.1 in)	19.4 mm (0.76 in)	264 mm (10.4 in)	194 mm (7.6 in)	385 kg/km (259 lb/1000 ft)
96	2.5 mm (0.1 in)	22.3 mm (0.87 in)	306 mm (12 in)	223 mm (8.7 in)	503 kg/km (338 lb/1000 ft)
144	2.5 mm (0.1 in)	25.9 mm (1.02 in)	360 mm (14.2 in)	259 mm (10.20 in)	649 kg/km (436 lb/1000 ft)
204 - 216	2.5 mm (0.1 in)	25.2 mm (0.99 in)	350 mm (13.8 in)	252 mm (9.9 in)	591 kg/km (397 lb/1000 ft)
252 - 288	2.5 mm (0.1 in)	28.3 mm (1.11 in)	425 mm (16.7 in)	283 mm (11.1 in)	606 kg/km (407 lb/1000 ft)

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	OM3	OM4	OM4 Extended Distance
Fiber Code	K	T	T	T	T
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/OM4+) meets 0.75 ns optical skew when used in all Corning Plug and 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.*

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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*

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

□	□	□	□	U	L	-	T	4	6	□	□	D	F	N
1			2	3	4		5	6	7	8		9	10	

1 Select fiber count.
Standard offerings:
012 - 288
Increments of 12

2 Select fiber code.
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2)
E = Single-mode (OS2) SMF-28e+®
Z = Single-mode (OS2) SMF-28® Ultra fiber

3 Defines cable type.
U = Loose tube

4 Defines outer jacket.
L = LSZH™ Double Dielectric Cable

5 Defines fiber placement.
T = 12 fibers/buffer tube (standard)

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

7 Defines tensile strength.
6 = 4500

8 Select performance option code.
30 = 62.5 µm multimode (OM1)
31 = 50 µm multimode (OM2)
80 = 50 µm multimode (OM3)
01 = Single-mode (OS2)
(Max. attenuation 0.4/0.4/0.3 dB/km)

9 Defines cable type.
D = Gel-free cable

10 Defines special manufacturing code.
FN= Industrial tray-rated rodent-resistant

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Notes

RoHS COMPLIANT

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