

Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

CORNING

Corning LSZH™ industrial fiber optic cables are designed for industrial building backbones and harsh environments atypical of traditional datacom systems. Based on proven stranded loose tube cable designs, these industrial cables are flame-retardant and have been tested to meet mechanical/environmental conditions exceeding the requirements set for traditional datacom cables. This ruggedized armored version offers additional mechanical protection and is also available in a gel-filled, cold temperature version. 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.

Features and Benefits

Low-smoke, zero-halogen sheath

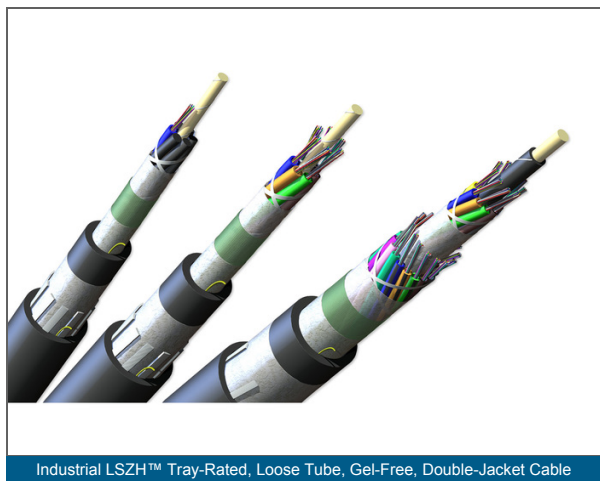
Key life-safety benefit

Meets cyclic impact and chemical resistance test

Superior performance

Common installations

Outdoor aerial and duct



Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

CORNING

Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
------	---

Specifications

General Specifications

Environment	Indoor/Outdoor
Product Type	Dielectric
Cable Type	Loose Tube
Flame Rating	LSZH (OFN-LS)

Temperature Range

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

Design Characteristics Cable

Fiber Count	Fibers per Tube	Number of Tube Positions	Number of Active Tubes	Buffer Tube Diameter
6	6	6	1	2.5 mm (0.1 in)
12 - 72	12	6	1 - 6	2.5 mm (0.1 in)
96	12	8	8	2.5 mm (0.1 in)
144	12	12	12	2.5 mm (0.1 in)
192 - 216	12	18	16 - 18	2.5 mm (0.1 in)
288	12	24	24	2.5 mm (0.1 in)

Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

CORNING

Mechanical Characteristics Cable

Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Cable Weight
6	17.6 mm (0.69 in)	264 mm (10.39 in)	176 mm (6.93 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	312 kg/km (209.65 lb/1000 ft)
12 - 72	17.9 mm (0.7 in)	269 mm (10.59 in)	179 mm (7.05 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	312 kg/km (209.65 lb/1000 ft)
96	20.8 mm (0.82 in)	312 mm (12.28 in)	208 mm (8.19 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	418 kg/km (280.88 lb/1000 ft)
144	24.4 mm (0.96 in)	366 mm (14.41 in)	244 mm (9.61 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	552 kg/km (370.93 lb/1000 ft)
192	23.3 mm (0.92 in)	350 mm (13.78 in)	233 mm (9.17 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	472 kg/km (317.17 lb/1000 ft)
216	23.7 mm (0.93 in)	356 mm (14.02 in)	237 mm (9.33 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	501 kg/km (336.66 lb/1000 ft)
288	26.8 mm (1.06 in)	402 mm (15.83 in)	268 mm (10.55 in)	4500 N (1011.64 lbf)	1500 N (337.21 lbf)	641 kg/km (430.73 lb/1000 ft)

Transmission Performance

Multimode

Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance
Fiber Code	K	T	T	T	T
Performance Option Code	30	31	80	90	91
Fiber Core Diameter	62.5 µm	50 µm	50 µm	50 µm	50 µm
Wavelengths	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm

Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

CORNING

Multimode

Maximum Attenuation	3.4 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	300 m / 550 m	750 m / 600 m	1000 m / 600 m	1000 m / 600 m	1100 m / 600 m
Serial 10 Gigabit Ethernet	33 m / -	150 m / -	300 m / -	550 m / -	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km	700 MHz*km / 500 MHz*km	1500 MHz*km / - 500 MHz*km	3500 MHz*km / 500 MHz*km	
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -	950 MHz*km / -	950 MHz*km / -	4700 MHz*km / -	5350 MHz*km / -

Transmission Performance

Single-mode

Fiber Name	Single-mode (OS2)	Single-mode (OS2) - Bend-Improved Single-mode (OS2)
Performance Option Code	00	01
Fiber Category	OS2	OS2
Wavelengths	1310 nm / 1383 nm / 1550 nm	1310 nm / 1383 nm / 1550 nm
Fiber Code	E	E - Z
Maximum Attenuation	0.35 dB/km / 0.35 dB/km / 0.25 dB/km	0.4 dB/km / 0.4 dB/km / 0.3 dB/km

Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Double-Jacket Cable

CORNING

□ □ □ □ U L - T 4 6 □ □ D 2 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 μ m multimode (OM1)
 T = 50 μ m multimode (OM2)
 E = Single-mode (OS2)
 SMF-28e+®
 Z = Single-mode (OS2)
 SMF-28® ULTRA

3 Defines cable type.

U = Gel-free cable

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 = See Specifications

8 Select performance option code.

30 = 62.5 μ m multimode (OM1)
 31 = 50 μ m multimode (OM2)
 80 = 50 μ m 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.

2N = Tray-rated industrial



Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States
 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2025 Corning Optical Communications. All rights reserved.