

Industrial Fiber Optic Cables, LSZH™ Single-Jacket Cable, 12-288 Fibers

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Solutions Product

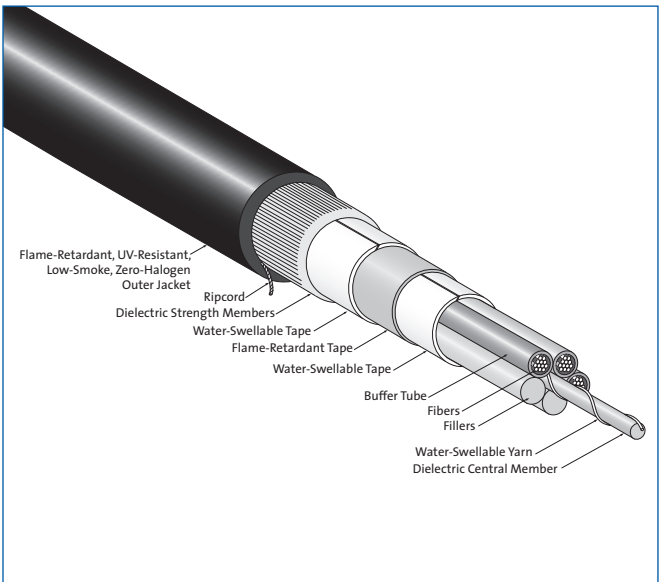
features and benefits |

Low-smoke/zero-halogen (LSZH) sheath	Key life-safety benefit
Meets cyclic impact and chemical resistance tests	Superior performance
Tray-rated per UL 13; UL 444; UL 1277; UL 1685; CSA C22.2 No. 230 and No. 232	Tested to industrial ruggedness standards
Listed OFN-LS and CSA FT4-ST1, IEC 60332-3, IEC 61034 and IEC 60754-2	Meets burn test criteria
Available in cold temperature version	Gel-filled

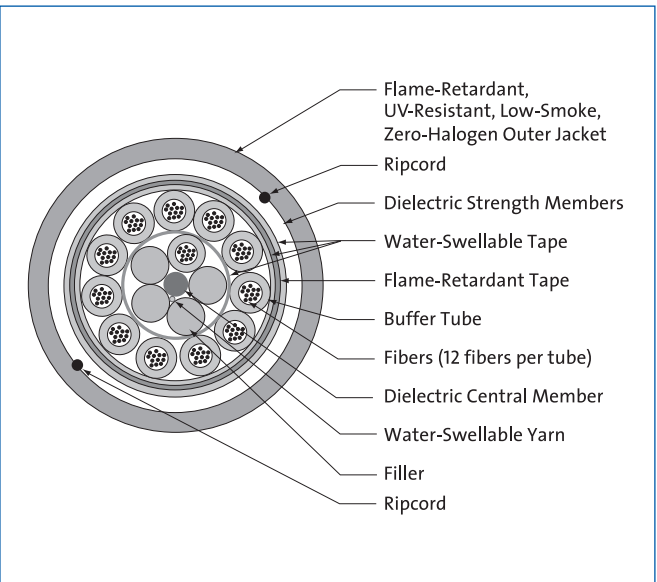
Corning Cable Systems LSZH™ Industrial Fiber Optic Cables are designed for industrial building backbones and harsh environments atypical of traditional datacom systems. Based on proven stranded loose tube cable designs, these tray-rated industrial cables are flame-retardant and have been tested to meet mechanical/environmental conditions exceeding the requirements set for traditional datacom cables. They have also demonstrated superior performance levels when tested to specified “tray” application requirements 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 ruggedized armored version is also offered for additional mechanical protection.

Corning Cable Systems 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,

(continued)



LSZH Industrial Cable, 36-Fiber | Drawing ZA-1897



LSZH Industrial Cable, 144-Fiber | Drawing ZA-2603

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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 and inorganic materials, such as metal and electronic equipment. Corning Cable Systems 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.

specifications |

Maximum Tensile Loads	Short-Term: 2700 N (600 lbf) Long-Term: 810 N (180 lbf)
Temperatures	Storage: -40° to +75°C (-40° to +167°F) Installation: -30° to +60°C (-22° to +140°F) Operation: -40° to +75°C (-40° to +167°F)
Approvals and Listings	National Electrical Code® (NEC®) OFN-LS, CSA OFN FT4-ST1; Sunlight Resistant (SUN RES); IEEE-383 flame test; Suitable for Direct Burial (DIR BUR); IEC 60332-3, IEC 60754-2, IEC 61034
Common Installations	Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770
Design and Test Criteria	ANSI/ICEA S-104-696; UL 13; UL 444; UL 1685; UL 1277; CSA C22.2 No. 230 and No. 232

Corning Cable Systems 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.

Fiber Count	Maximum Fibers per Tube	Number of Tube Positions	Nominal Cable Weight kg/km (lb/1000 ft)	Nominal Outside Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Installed cm (in)
≤ 60	12	5	168 (113)	14.0 (0.55)	21.0 (8.3)	14.0 (5.5)
72	12	6	193 (130)	14.9 (0.59)	22.4 (8.8)	14.9 (5.9)
96	12	8	282 (190)	17.9 (0.70)	26.9 (10.6)	17.9 (7.0)
120	12	10	322 (216)	19.9 (0.78)	29.9 (11.8)	19.9 (7.8)
192	12	16	341 (229)	20.0 (0.79)	30.0 (11.8)	20.0 (7.9)
216	12	18	354 (238)	20.9 (0.82)	31.4 (12.4)	20.9 (8.2)
240	12	20	426 (286)	22.6 (0.89)	33.9 (13.3)	22.6 (8.9)
288	12	24	503 (338)	24.8 (0.98)	37.2 (14.6)	24.8 (9.8)

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transmission performance |

	LANscape® 62.5 Solutions	LANscape Pretium® 150 Solutions	LANscape Pretium 300 Solutions	LANscape Pretium 550 Solutions	LANscape Pretium 600 Solutions	Single-Mode
Fiber Code	K	T	T	T	T	E
Performance Option Code	30	31	80	90	91	01
Optical Fiber Type (µm)	62.5 Multimode	50 Multimode	50 Multimode	50 Multimode	50 Multimode	Single-mode****
ISO/IEC 11801 Nomenclature	OM1	OM2	OM3***	OM4***	OM4***	OS2
Wavelength (nm)	850/1300	850/1300	850/1300	850/1300	850/1300	1310/1383/1550
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0	0.4/0.4/0.3
Minimum Over Filled 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/ –	– / – / –
Serial 1 Gigabit Ethernet Distance (m)	300/550	750/600	1000/600	1100/600	1100/600	5000 / – / –
Serial 10 Gigabit Ethernet Distance (m)	33/ –	150/ –	300/ –	550*/ –	600**/ –	10000/ – /40000

* Assumes 1.0 dB maximum total connector/splice loss.

** Assumes 0.7 dB maximum total connector/splice loss.

*** Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™ Systems solutions.

**** ITU 652.D compliant.

Notes:

1) Improved attenuation and bandwidth options available.

2) Bend-insensitive single-mode fibers available on request.

3) Contact a Corning Cable Systems Customer Service Representative for additional information.

4) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

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[ordering information](#) | [Contact Customer Service for availability of non-standard offerings.](#)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	W	Z	-	T	4	1	<input type="checkbox"/>	<input type="checkbox"/>	D	2	N
1	2	3	4	5	6		7	8	9	10	11	12	13	14

|1-3

Select fiber count.

Standard offerings:

012	060	216
024	072	240
036	144	288
048	192	

|4

Select fiber code
(see Transmission
Performance table).

|5 / 12

Defines cable type.

W / D = Standard for
loose tube

|6

Defines outer jacket.

Z = LSZH™ Cable

|7

Defines fiber placement.

T = Standard for loose tube

|8

Defines length
markings.

4 = Markings in feet
(standard)

|9

Defines tensile strength
(see Specifications).

|10-11

Select performance
option code (see
Transmission
Performance table).

|13-14

Defines special
requirements.
2N = Industrial

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