ALTOS® LSZH™ Gel-Free Cables, OFN-LS Listed

A LANscape® Pretium™ Solutions Product

Corning
Cable Systems

Applications

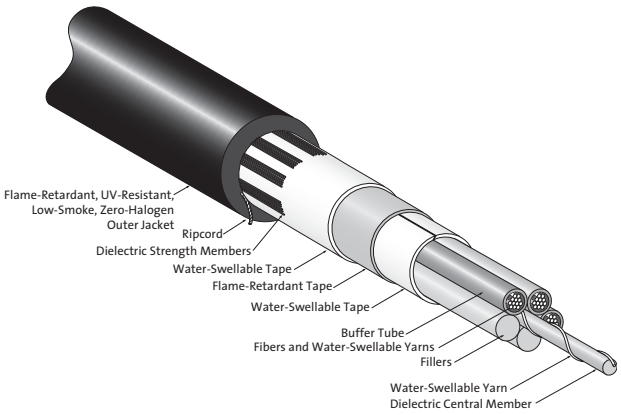
- Interbuilding backbones in aerial and duct environments
- Horizontal intrabuilding and tunnel backbones where limited-smoke, zero-halogen requirements exist

Description

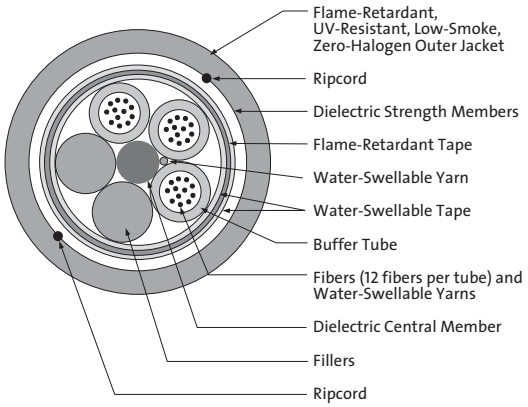
Corning Cable Systems ALTOS® LSZH™ Gel-Free Cables are flame-retardant cables designed for indoor and outdoor use. Based on the loose tube cable design pioneered by Corning Cable Systems, this redesigned version has no messy gels, eliminating the need for cleaning solvents while making cable access and installation of buffer tube fan-outs simple, craft-friendly processes. Available from two to 288 fibers, the design also provides a high fiber density within a given cable diameter while allowing flexibility to suit many system designs. The outer jacket uses a flame-retardant, non-halogenated material with UV and chemical resistance and low flame spread.

Features / Benefits

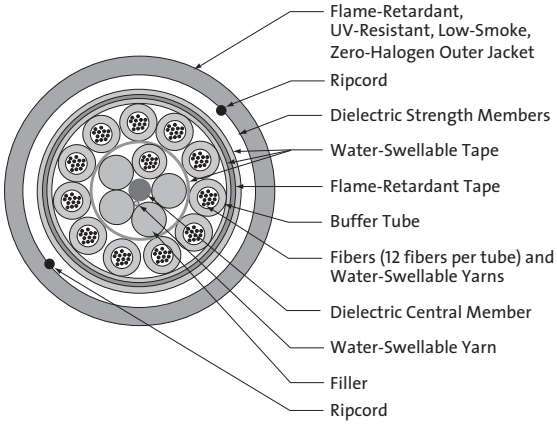
- Gel-free cable design makes cable access and use of buffer tube fan-out kits simple and craft-friendly
- Available in 62.5 µm, 50 µm, single-mode and hybrid versions
- Standard 3.0 mm buffer tube size reduces the number of access tools required by crafts personnel
- SZ-stranded, loose tube design isolates fibers from installation and environmental rigors and allows for easy mid-span access
- Specially formulated black, flame-retardant, non-halogenated material with UV and chemical resistance and low flame spread
- All-dielectric construction
- Ideal for industrial applications
- Available with interlocking armor
- IEEE-383 compliant
- Listed OFN-LS and CSA OFN FT4-ST1 up to 288 fibers
- Available with MSHA (Mine Safety and Health Administration) approval
- Available with Gigabit Ethernet and 10 Gigabit Ethernet performance



ALTOS LSZH Gel-Free Cable | Drawing ZA-1897



36-Fiber ALTOS LSZH Gel-Free Cable | Drawing ZA-2602



144-Fiber ALTOS LSZH Gel-Free Cable | Drawing ZA-2603

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Product Specifications

ALTOS® LSZH™ Gel-Free Cables, OFN-LS Listed

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Cable Systems

Specifications

Maximum Tensile Loads	Short-Term: 2700 N (600 lbf) Long-Term: 810 N (180 lbf)
Temperatures	Storage: -40° to +70°C (-40° to +158°F) Installation: -10° to +60°C (+14° to +140°F) Operation: -40° to +70°C (-40° to +158°F)
Approvals and Listings	National Electrical Code® (NEC®) OFN-LS, CSA OFN FT-4-ST1, IEEE-383
Common Installations	Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770
Design and Test Criteria	ANSI/ICEA S-104-696

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 Weight kg/km (lb/1000 ft)	Nominal Outer Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)
≤ 60	12	5	158 (106)	14.0 (0.55)	17.7 (7.0)	14.0 (5.5)
72	12	6	181 (121)	14.9 (0.58)	20.0 (7.9)	14.9 (5.8)
96	12	8	267 (179)	17.9 (0.70)	26.8 (10.5)	17.9 (7.0)
120	12	10	321 (215)	19.9 (0.78)	29.8 (11.7)	19.9 (7.8)
144	12	16	290 (194)	20.0 (0.79)	30.0 (11.8)	20.0 (7.9)
216	12	18	318 (213)	20.9 (0.82)	29.0 (11.4)	20.9 (8.2)
240	12	20	385 (258)	22.6 (0.89)	33.9 (13.3)	22.6 (8.9)
288	12	24	453 (304)	24.8 (0.98)	37.2 (14.6)	24.8 (9.8)

Transmission Performance

Fiber Code	K	C	S	S	E
Performance Option Code	**30**	**31**	**80**	**90**	**01**
Fiber Type	62.5/125 µm (850/1300 nm)	50/125 µm (850/1300 nm)	50/125 µm (850/1300 nm)	50/125 µm (850/1300 nm)	Single-mode (1310/1383/1550 nm)
Maximum Attenuation (dB/km)	3.5/1.0	3.5/1.5	3.0/1.5	3.0/1.5	0.4/0.4/0.3
Minimum LED Bandwidth (MHz•km)	200/500	500/500	1500/500	1500/500	– / – / –
Minimum Effective Modal Bandwidth (MHz•km)	*220/ –	*510/ –	**2000/ –	***4700/ –	– / – / –
Serial Gigabit Ethernet Distance (m)	300/550	600/600	1000/600	1000/600	5000/ – / –
Serial 10 Gigabit Ethernet Distance (m)	33/ –	82/ –	300/ –	****550/ –	10000/40000

** As predicted by RML BW, per TIA/EIA 455-204 and IEC 60793-1-41, for intermediate performance laser-based systems (up to 1 Gb/s).*
*** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).*
**** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).*
***** The 550 m distance is equivalent to a 4700 EMB system with standards-compliant transceiver and fiber characteristics, 3.0 dB/km cable attenuation and 1.0 dB total connector loss.*

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Ordering Information

Contact Customer Service for other options.

☐ ☐ ☐ ☐ W ☐ - T 4 1 ☐ ☐ D 2 0

1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - 3 Select fiber count.

Standard Offerings:

006	024	048	096	192	288
012	036	072	144	216	

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.

W/D = ALTOS® Gel-Free Cable

6 Select outer jacket.

Z = Indoor/outdoor low-smoke, zero halogen jacket (standard)
S = MSHA-rated version

7 Defines fiber placement.

T = 12 fibers/buffer tube (standard)

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.

20 = No special requirements

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Published in the USA. LAN-278-EN / November 2005 / 10

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