

FREEDM[®] LST[™] Gel-Free Cables

A LANscape[®] Pretium[™] Solutions Product

Corning
Cable Systems

Applications

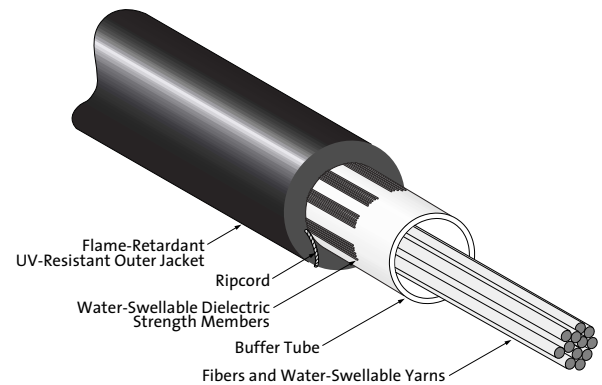
- Inter- and intrabuilding backbones in aerial, duct and riser applications

Description

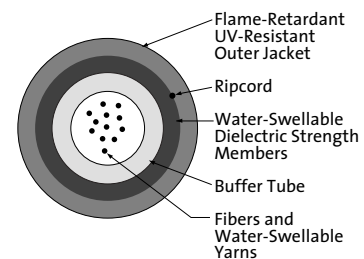
Corning Cable Systems FREEDM[®] LST[™] Gel-Free Cables are flame-retardant, indoor/outdoor, riser-rated cables suitable for installation in aerial, duct and riser applications. Because of the riser rating, there is no need for a transition splice when entering the building. Using water-swallowable yarns both inside and surrounding the buffer tubes, these cables are fully water-blocked without the use of messy gels, providing for more efficient and craft-friendly cable preparation. Available in a compact design from 2 to 24 fibers, the buffer tubes and fibers in each tube are color-coded for quick, easy identification.

Features / Benefits

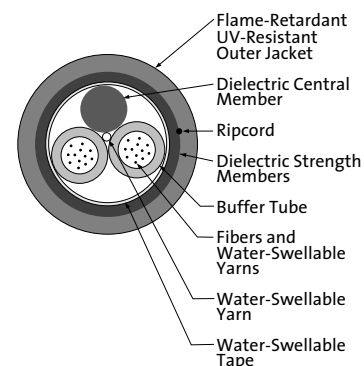
- Gel-free design is fully waterblocked using craft-friendly, water-swallowable yarns, making cable access and use of buffer tube fan-out kits simple
- Available in 62.5 μm , 50 μm , single-mode and hybrid versions
- Standard 3 mm buffer tube size reduces the number of access tools required by craftspersons
- Flame-retardant jacket is rugged, durable and easy to strip
- Compact design, all-dielectric cable construction requires no grounding or bonding
- Color-coded fibers and buffer tubes for quick and easy identification during installation
- No preferential bend axis for easier installation and better handling
- UV-resistant and listed OFNR and FT-4
- Compatible with buffer tube fan-out kit for rapid, simple termination
- Available with interlocking armor
- Available with Gigabit Ethernet and 10 Gigabit Ethernet performance



FREEDM LST Gel-Free Cable | Drawing ZA-2470



12-Fiber FREEDM LST Gel-Free Cable | Drawing ZA-2470



24-Fiber FREEDM LST Gel-Free Cable | Drawing ZA-2470

Specifications

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 [®]) OFNR, CSA OFN FT-4
Common Installations	Outdoor aerial and duct; indoor vertical riser and 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	Nominal Weight kg/km (lb/1000 ft)	Nominal Diameter mm (in)	Maximum Tensile Load		Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)
			Short-Term N (lbf)	Long-Term N (lbf)		
2-12	55 (37)	8.0 (0.31)	1330 (300)	400 (90)	12.0 (4.9)	8.0 (3.1)
13-24	72 (48)	11.2 (0.44)	2700 (600)	810 (180)	16.8 (6.6)	11.2 (4.4)

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 TLA/ELA 455-204 and IEC 60793-1-41, for intermediate performance laser-based systems (up to 1 Gb/s).

** As predicted by minEMBc, per TLA/ELA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).

*** As predicted by minEMBc, per TLA/ELA 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.

Ordering Information

Contact Customer Service for other options.

S F - 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:

004 006 012 018 024

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.

S/D = FREEDM® LST™ Gel-Free Cable

6 Defines outer jacket.

F = Indoor/outdoor riser

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

FREEDM[®] LST[™] Gel-Free Cables

A LANscape[®] Pretium[™] Solutions Product

Corning
Cable Systems

Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA
800-743-2675 • FAX: 828-901-5973 • International: +1-828-901-5000 • <http://www.corning.com/cablesystems>

Corning Cable Systems reserves the right to improve, enhance and modify the features and specifications of Corning Cable Systems products without prior notification. FREEDM and LANscape are registered trademarks of Corning Cable Systems Brands, Inc. Pretium is a trademark of Corning Cable Systems Brands, Inc. LST is a trademark of Corning Cable Systems LLC. Discovering Beyond Imagination is a trademark of Corning Incorporated. All other trademarks are the properties of their respective owners. Corning Cable Systems is ISO 9001 certified. © 2001, 2005 Corning Cable Systems. All rights reserved. Published in the USA. LAN-87-EN / October 2005 / 1M



CORNING
Discovering Beyond Imagination

LANscape[®]
PRETIUM
THE PREMIER SOLUTION