

FREEDM[®] LST[™] Cables

CORNING

Features and Benefits

Riser rating

No transition splices when entering buildings

Gel-free waterblocking technology

Craft-friendly cable preparation

Color-coded tubes and fibers

Quick and easy identification

All-dielectric cable construction

Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

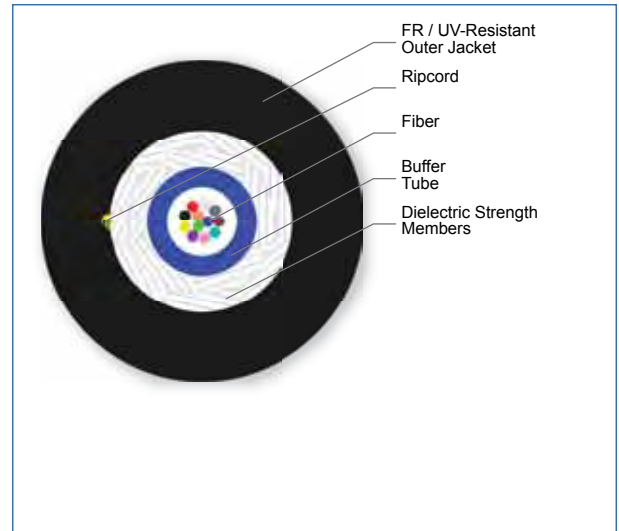
Corning Cable Systems FREEDM[®] LST[™] Gel-Free Cables are flame-retardant, indoor/outdoor, riser-rated cables designed for interbuilding and intrabuilding backbones in aerial, duct and riser applications. With a riser rating, there is no need for a transition splice when entering the building. Available in a compact design, these cables are protected against water penetration by innovative waterblocking tapes and yarns that swell to absorb water. Waterblocking without the use of messy gels provides more efficient and craft-friendly cable preparation, allows easier cable access and simplifies the use of buffer tube fan-out kits. The buffer tubes and fibers in each tube are color-coded for quick, easy identification.

Standards

Approval 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



FREEDM[®] LST[™] Cables, 12-Fibers

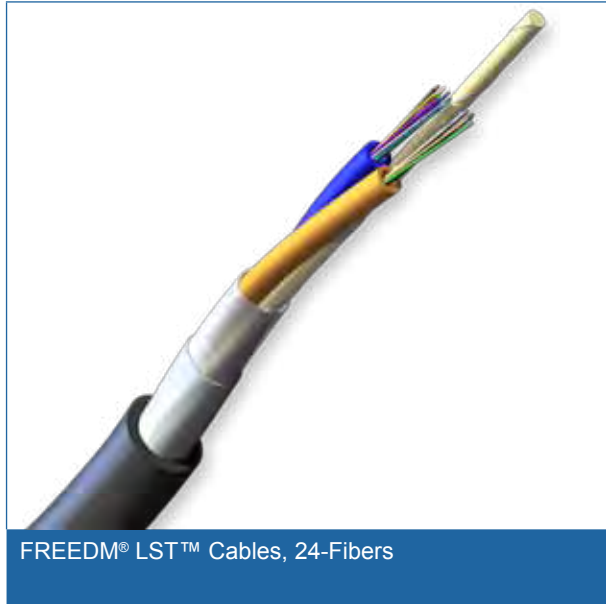


FREEDM[®] LST[™] Cables, 12-Fibers

CORNING

FREEDM® LST™ Cables

CORNING



Specifications

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

* 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.

Mechanical Characteristics Cable					
Fiber Count	Product Type	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
2 - 12	Dielectric	7.4 mm (0.29 in)	111 mm (4.4 in)	37 mm (1.5 in)	56 kg/km (38 lb/1000 ft)
18 - 24	Dielectric	9.7 mm (0.38 in)	146 mm (5.7 in)	97 mm (3.8 in)	78 kg/km (53 lb/1000 ft)

CORNING

FREEDM® LST™ Cables



Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
------	---

Transmission Performance

Fiber Type	Multimode	Multimode	Multimode	Multimode	Multimode	Single-mode
Fiber Core Diameter (µm)	62.5	50	50	50	50	8.2
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance	OS2
Fiber Code	K	T	T	T	T	E
Performance Option Code	30	31	80	90	91	01
Wavelengths (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
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 / -	
Serial 1 Gigabit Ethernet (m)	300 / 550	750 / 600	1000 / 600	1100 / 600	1100 / 600	5000 / - / -
Serial 10 Gigabit Ethernet (m)	33 / -	150 / -	300 / -	550 / -	600 / -	10000 / - / 40000

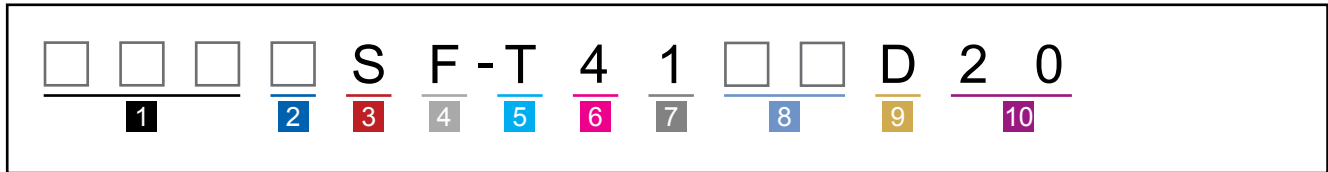
- Notes: 1) Improved attenuation and bandwidth options available.
 2) Bend-insensitive single-mode fibers available on request.
 3) Contact a Corning Cable Systems Customer Care Representative for additional information.
 4) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.



FREEDM® LST™ Cables

CORNING

Ordering Information | Contact Customer Care at 1-800-743-2671 for other options.



1 Select fiber count.

Standard offerings:
002 008 018
004 012 024

2 Select fiber code.

K = 62.5 μ m multimode, OM1
T = 50 μ m multimode, OM2, OM3, OM4, OM4+
E = Single-mode, OS2
SMF-28e®

3 Defines cable type.

S = FREEDM® LST™
Gel-Free Cable

4 Defines outer jacket.

F = Indoor/outdoor riser

5 Defines fiber placement.

T = 12 fibers/buffer tube (standard)

6 Defines length markings.

4 = Markings in feet (standard)

7 Defines tensile strength.

1 = 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
90 = 50 μ m multimode, OM4
91 = 50 μ m multimode, OM4+
01 = Single-mode, OS2
(Max. attenuation .4 / .3 dB/km)

9 Defines cable type.

D = FREEDM® LST™
Gel-Free Cable

10 Defines special requirements.

20 = No special requirements

This cable is available in 12 different jacket colors: blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. Black is the standard jacket color using the part number configurator above. Contact Customer Care at 1-800-743-2675 to order other color options.



Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/cablesystems

A complete listing of the trademarks of Corning Cable Systems is available at www.corning.com/cablesystems/trademarks.

Corning Cable Systems is ISO 9001 certified. © 2012 Corning Cable Systems. All rights reserved.

CORNING