

FREEDM® LST™ Gel-Free Interlocking Armored Cables

CORNING

Features and Benefits

Flexible, interlocking armor design

Seven times crush protection compared to unarmored cables

Gel-free waterblocking technology

Craft-friendly cable preparation

Color-coded tubes and fibers

Quick and easy identification

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

Standards

Approval and Listings	National Electrical Code® (NEC®) OFCR, CSA OFC 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

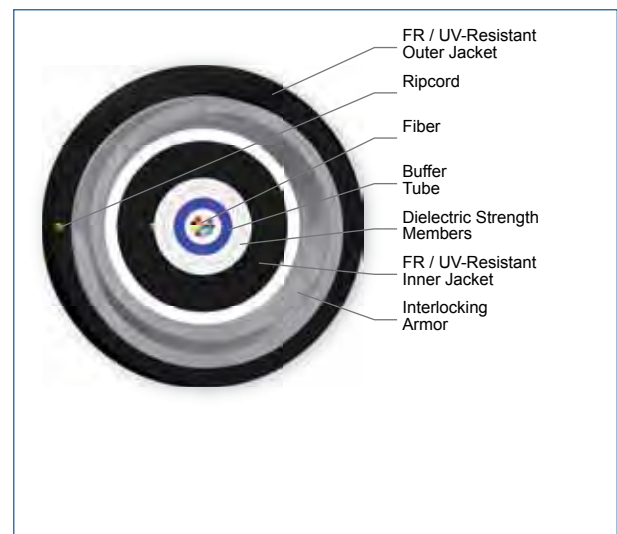
Corning Cable Systems FREEDM® LST™ Gel-Free Interlocking Armored Cables are flame-retardant, indoor/outdoor, riser-rated cables designed for interbuilding and intrabuilding backbones in aerial, duct and riser applications. Encased in a spirally wrapped, aluminum interlocking armor for ruggedness and superior crush resistance, these cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables and for high-fiber-count trunking applications in areas with limited conduit or vault space. The riser rating precludes the need for a transition splice when entering the building.

Available in a compact design in fiber counts from 2 to 24 fibers, these cables are protected against water penetration by innovative waterblocking materials that swell to absorb water, without the use of messy gels, to provide more efficient and craft-friendly cable preparation. This waterblocking technology makes cable access easier and simplifies the use of buffer tube fan-out kits.

The SZ-stranded, loose tube design isolates fibers from installation and environmental rigors and allows for easy midspan access. The cable design is also National Electrical Code® (NEC®) listed (OFCR and FT-4). The all-dielectric cable construction requires no grounding or bonding and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.



FREEDM® LST™ Gel-Free Interlocking Armored Cables, 12-Fibers



FREEDM® LST™ Gel-Free Interlocking Armored Cables, 12-Fibers

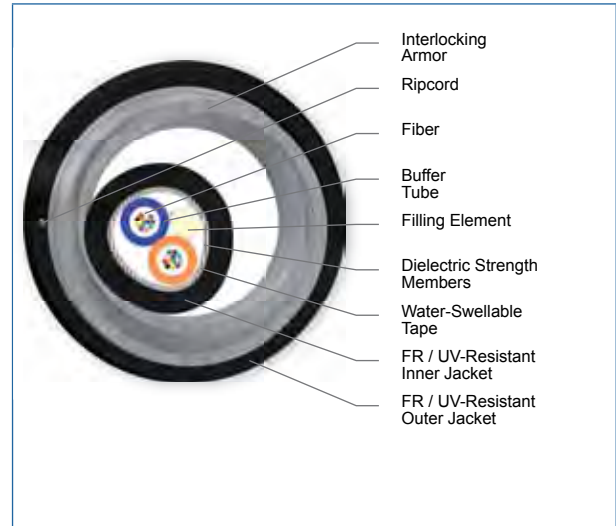
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FREEDM® LST™ Gel-Free Interlocking Armored Cables, 24-Fibers



FREEDM® LST™ Gel-Free Interlocking Armored Cables, 24-Fibers

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

Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	810 N (180 lbf)

Fiber Count	Product Type	Nominal Core Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
2 - 12	Interlocking armor	8.0 mm (0.31 in)	15 mm (0.59 in)	225 mm (8.9 in)	150 mm (5.9 in)	182 kg/km (122 lb/1000 ft)
18 - 24	Interlocking armor	11.2 mm (0.44 in)	18.8 mm (0.74 in)	282 mm (11.1 in)	188 mm (7.4 in)	259 kg/km (174 lb/1000 ft)

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Chemical Characteristics

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

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

				S	F	-	T	4	1			D	A	1
1	2	3	4	5	6	7	8	9	10					

1 Select fiber count.

Standard offerings:

002 006 018
004 012 024

2 Select fiber code.

K = 62.5 µm multimode, OM1
T = 50 µm 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 µm multimode, OM1
31 = 50 µm multimode, OM2
80 = 50 µm multimode, OM3
90 = 50 µm multimode, OM4
91 = 50 µm 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.

A1 = Interlocking armor with
riser-rated outer jacket



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