

FREEDM® LST™ Loose Tube, Gel-Free Cable, Riser 24 F, Single-mode (OS2)

CORNING

Part Number:
024ESF-T4101D20

Corning 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.

Note: This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Riser rating

No transition splices when entering buildings

Gel-free waterblocking technology

Craft-friendly cable preparation

Color-coded fibers

Quick and easy identification

All-dielectric construction

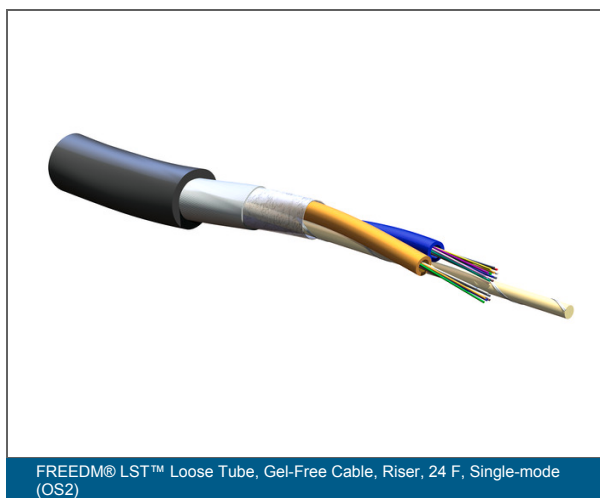
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

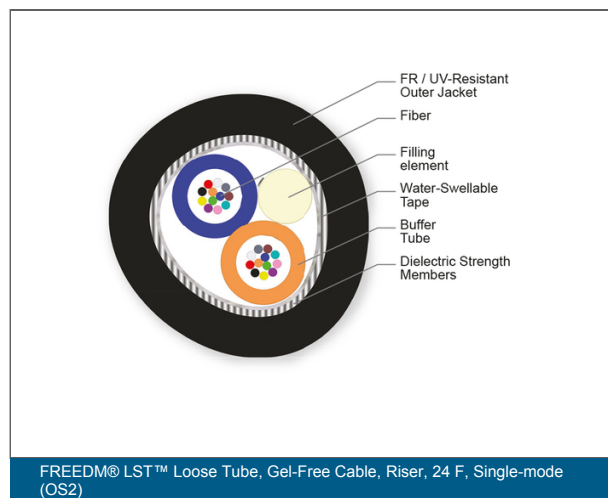
Rugged, durable and easy to strip

Common installations

Outdoor aerial and duct



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Specifications

General Specifications

Cable Type	Loose Tube
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	Single-mode (OS2)
Flame Rating	Riser (OFNR)
Application	Aerial, Direct Buried, Duct, General purpose, Horizontal
Cable geometry	Round

Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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 National Electrical Code® (NEC®) Article 770
Design and Test Criteria	ANSI/ICEA S-104-696

Environmental Conditions

Notes	Operation: -40°C (-40°F) minimum operation temperature for 50 µm multimode optical fiber types
Temperature Range, Installation	-10 °C to 60 °C (14 °F to 140 °F)
Temperature Range, Operation	-40 °C to 70 °C (-40 °F to 158 °F)
Temperature Range, Storage	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design

Fiber Count	24
Number of Ripcords	1
Outer Jacket Color	Black

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Cable Design

Outer Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Buffer Tube Color	Blue, Orange
Number of Active Tubes	2
Number of Tube Positions	2
Tape	Water-swellable
Tape, Layer 1	Water-swellable
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Color Code Standards	Telcordia

Mechanical Specifications

Max. Tensile Strength, Long-Term	810 N (182.1 lbf)
Max. Tensile Strength, Short-Term	2700 N (606.98 lbf)
Min. Bend Radius Installation	146 mm (5.75 in)
Min. Bend Radius Operation	97 mm (3.82 in)
Nominal Outer Diameter	9.7 mm (0.38 in)
Notes	<i>Actual cable outer diameter may vary ± 0.3 mm</i>

Optical Characteristics

Fiber Code	E
Fiber Name	Single-mode (OS2)
Fiber Type	Single-mode
Performance Option Code	01
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm

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Optical Characteristics	
Fiber Category	G.652.D

Dimensions	
Cable Weight	78 kg/km (52.41 lb/1000 ft)
Length	0 mm (0 in)



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