FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser

12 F, Single-mode (OS2)

CORNING

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.

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 (OFNR 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.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, 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 standard 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
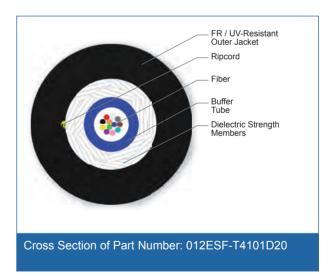
Color-coded fibers
Quick and easy identification

All-dielectric construction
Requires no grounding or bonding

UV-resistant, flame-retardant jacket
Rugged, durable and easy to strip

Part Number: 012ESF-T4101D20

FR / UV-Resistant Outer Jacket
Ripcord
Fiber
Buffer Tube
Dielectric Strength Members

Cross Section of Part Number: 012ESF-T4101D20

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Standards

Approval and Listings	National Electrical Code® (NEC®) OFNR, CSA OFN FT-4
Common Installations	Outdoor lashed 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

Specifications

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

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)

Cable Design	
Fiber Count	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	1
Number of Active Tubes	1
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tensile Strength Elements and/or Armoring - Layer 2	Water-swellable dielectric strength members

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Cable Design

Number of Ripcords	1
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable

Weight	56 kg/km (38 lb/1000 ft)
Nominal Outer Diameter	7.4 mm (0.29 in)
Max. Tensile Strengths, Short-Term	1350 N (300 lbf)
Max. Tensile Strengths, Long-Term	400 N (90 lbf)
Min. Bend Radius Installation	111 mm (4.4 in)
Min. Bend Radius Operation	37 mm (1.5 in)

Chemical Characteristics

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

Fiber Specifications

Optical Characteristics (cabled)

Fiber Type	Single-mode
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
Fiber Code	E
Performance Option Code	01
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m

* ITU-T G.652 D compliant.
* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

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.*

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Ordering Information

Part Number	012ESF-T4101D20
Product Description	FREEDM® LST™ Single-Tube, Gel-Free Cable, 12 F, Single-mode (OS2)

RoHS COMPLIANT

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