FREEDM[®] LST[™] Loose-Tube, Gel-Free Cable, Riser

2 F, 50 µm multimode, extended 10G distance (OM4)



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

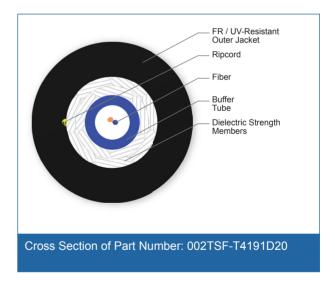
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

Common installations

Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770



Standards

Listings	National Electrical Code® (NEC®) OFNR
Design Criteria	CSA OFN FT-4
Test Criteria	ANSI/ICEA S-104-696

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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	50 μm MM (OM4+)

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	2
Fiber Coloring	Blue, Orange
Fibers per Tube	2
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
Number of Ripcords	1
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

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



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Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM4 Extended Distance
Fiber Code	T
Performance Option Code	91
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	5350 MHz*km / -

^{*} Assumes 0.7 dB maximum total connector/splice loss.

Notes: 1) 50 μ m multimode fiber macrobend loss \leq 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

- 2) Improved attenuation and bandwidth options available.
- 3) Bend-insensitive single-mode fibers available on request.
- 4) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	002TSF-T4191D20
Product Description	FREEDM® LST™ Single-Tube, Gel-Free Cable, Riser, 2 F, 50 µm multimode, extended 10G distance (OM4)



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^{*} Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.