

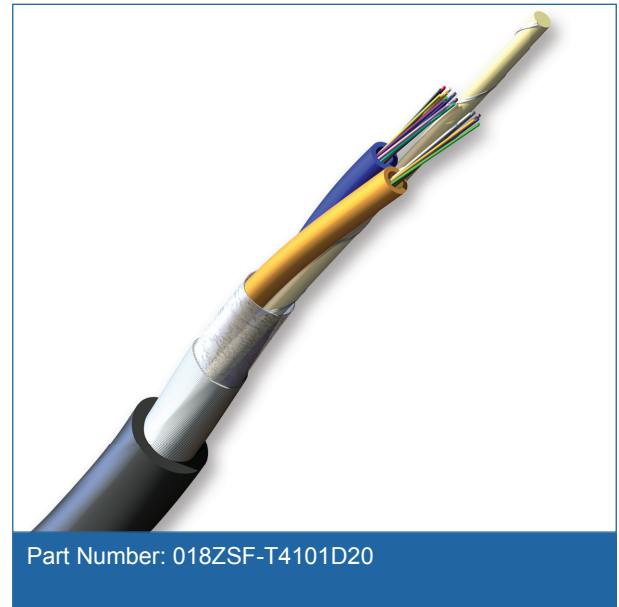
# FREEDM® LST™ Loose-Tube, Gel-Free Cable, Riser

18 F, SMF-28® Ultra fiber, Single-mode (OS2)

CORNING

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

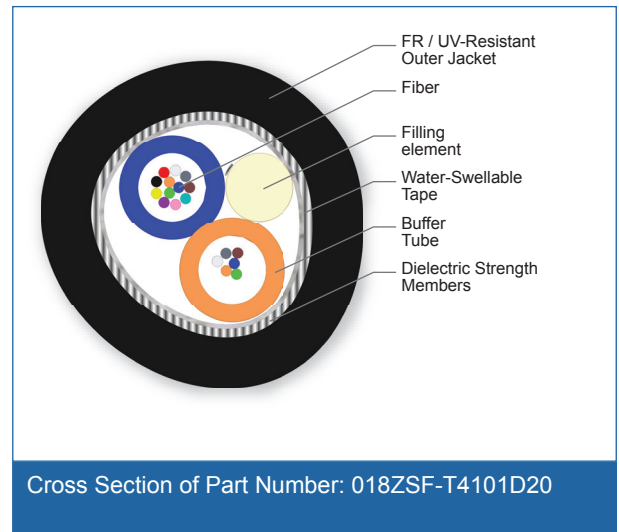
Requires no grounding or bonding

### 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	SMF-28 <sup>®</sup> Ultra fiber

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	18
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12, 6
Number of Tube Positions	2
Number of Active Tubes	2
Buffer Tube Color Coding	Blue, Orange
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tape	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Number of Ripcords	1
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Weight	78 kg/km (53 lb/1000 ft)
Nominal Outer Diameter	9.7 mm (0.38 in)
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)

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## Mechanical Characteristics Cable

Min. Bend Radius Installation	146 mm (5.7 in)
Min. Bend Radius Operation	97 mm (3.8 in)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Name	SMF-28 <sup>®</sup> Ultra fiber
Fiber Category	G.657.A1
Fiber Code	Z
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
Typical Attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

\* For more information on typical attenuation please see the Corning whitepaper at [http://csmedia.corning.com/opcomm//Resource\\_Documents/whitepapers\\_rl/LAN-1863-AEN.pdf](http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/LAN-1863-AEN.pdf)

## Ordering Information

Part Number	018ZSF-T4101D20
Product Description	FREEDM <sup>®</sup> LST <sup>™</sup> Loose Tube, Gel-Free Cable, 18 F, SMF-28 <sup>®</sup> Ultra fiber, Single-mode (OS2)



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