

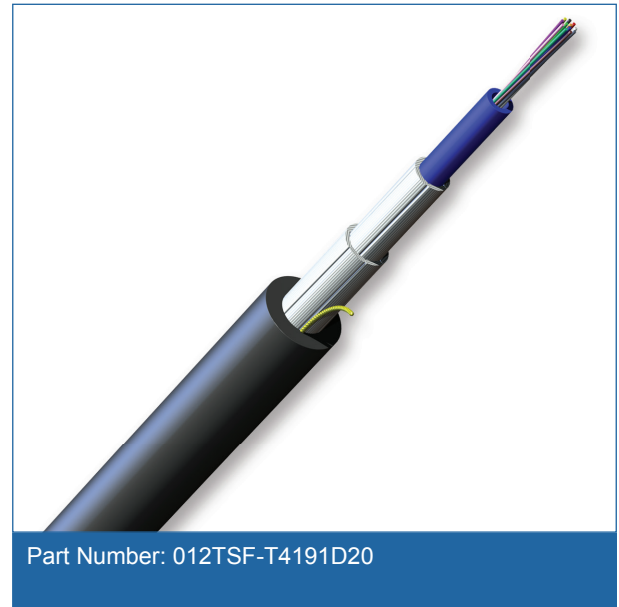
# FREEDM® LST™ Loose-Tube, Gel-Free Cable, Riser

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

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

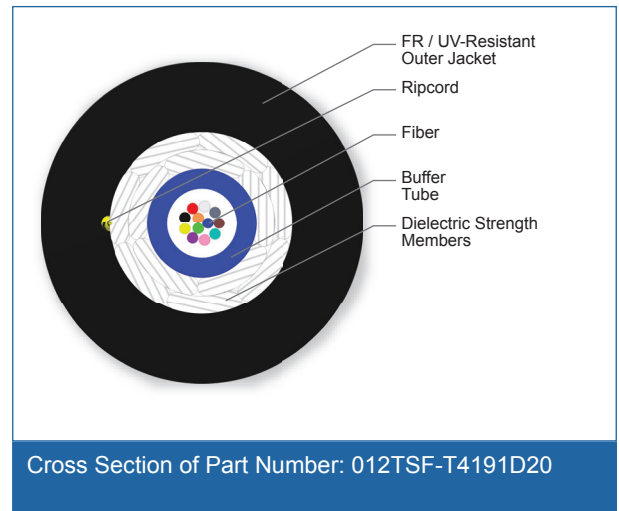
Requires no grounding or bonding

### 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

|                        |                                       |
|------------------------|---------------------------------------|
| <b>Listings</b>        | National Electrical Code® (NEC®) OFNR |
| <b>Design Criteria</b> | CSA OFN FT-4                          |
| <b>Test Criteria</b>   | 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 $\mu$ m 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   | 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                                      |
| 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 Strength, Short-Term | 1350 N (300 lbf)         |
| Max. Tensile Strength, Long-Term  | 400 N (90 lbf)           |
| 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.

\* Meets 0.75 ns optical skew when used in all Corning Plug and Play<sup>™</sup>/EDGE<sup>™</sup> systems solutions.

- Notes:
- 1) 50 µm multimode fiber macrobend loss ≤ 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         | 012TSF-T4191D20   |
| Product Description | FREEDM <sup>®</sup> LST <sup>™</sup> Single-Tube, Gel-Free Cable, Riser, 12 F, 50 µm multimode, extended 10G distance (OM4) |
| EAN Code            | 4056418147970   |



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • [www.corning.com/opcomm](http://www.corning.com/opcomm)

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