# FREEDM® One Tight-Buffered Cable, Riser

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



Corning FREEDM® One riser cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial and duct applications with no need for a transition splice when entering the building. The tight-buffered construction facilitates easier termination for low-fiber-count applications in the local area network (LAN) and eliminates the need for fan-out kits. The design features TIA-598 color-coded 900 µm buffered fibers for easy identification, consistent stripping and direct termination. The small diameter and bend radius of the cable allow for easy installation in space-constrained areas while the innovative waterblocking technology is ideal for outside plant (OSP) applications. The all-dielectric cable construction requires no grounding or bonding, and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip.

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

Waterblocking technology OSP (outdoor) applications

Small diameter and bend radius

Easy installation in space-constrained areas

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

# FR / UV-Resistant Outer Jacket Dielectric Strength Yarms Dielectric Strength Yarns Tight-Buffered Fiber Cross Section of Part Number: 006T8F-31191-29

### **Standards**

Approvals and Listings National Electrical Code®

(NEC®) OFNR, FT-4

Design and Test Criteria ICEA S-104-696

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## **Specifications**

| General Specifications |  |
|------------------------|--|
| Environment            | Indoor/Outdoor Cables                                    |
| Application            | Aerial, Duct, General Purpose Horizontal, Vertical Riser |
| Cable Type             | Tight-Buffered   |
| 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  |  |
|---|--|
| Central Element                                     | Dielectric                               |
| Fiber Count   | 6  |
| Tight Buffer Color                                  | Blue, Orange, Green, Brown, Slate, White |
| Tensile Strength Elements and/or Armoring - Layer 1 | Water-swellable strength members         |
| Outer Jacket Material                               | Flame-Retardant, UV-Resistant            |
| Outer Jacket Color                                  | Black                                    |

| Mechanical Characteristics Cable  |                              |
|-----------------------------------|------------------------------|
| Weight                            | 25.7 kg/km (17.3 lb/1000 ft) |
| Nominal Outer Diameter            | 5.5 mm (0.22 in)             |
| Min. Bend Radius Installation     | 83 mm (3.2 in)               |
| Min. Bend Radius Operation        | 55 mm (2.2 in)               |
| Max. Tensile Strength, Short-Term | 675 N (150 lbf)              |
| Max. Tensile Strength, Long-Term  | 200 N (45 lbf)               |

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



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### **Fiber Specifications**

| Optical Characteristics (cabled)        |                          |  |
|---|--------------------------|--|
| Fiber Core Diameter                     | 50 μm                    |  |
| Fiber Category                          | OM4 Extended Distance    |  |
| Fiber Code                              | Т                        |  |
| Performance Option Code                 | 91                       |  |
| Wavelengths                             | 850 nm / 1300 nm         |  |
| Maximum Attenuation                     | 2.8 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 / -          |  |

### **Ordering Information**

| Part Number         | 006T8F-31191-29   |
|---------------------|---|
| Product Description | FREEDM® One Tight-Buffered Cable, Riser, 6 F, 50 $\mu m$ multimode, extended 10G distance (OM4) |
| EAN Code            | 4056418149554   |



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