

# FREEDM® One Tight-Buffered Cable, Riser 6 F, 50 $\mu$ m multimode (OM3)

CORNING

**Part Number:**  
**006T8F-31180-29**

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  $\mu$ m 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**

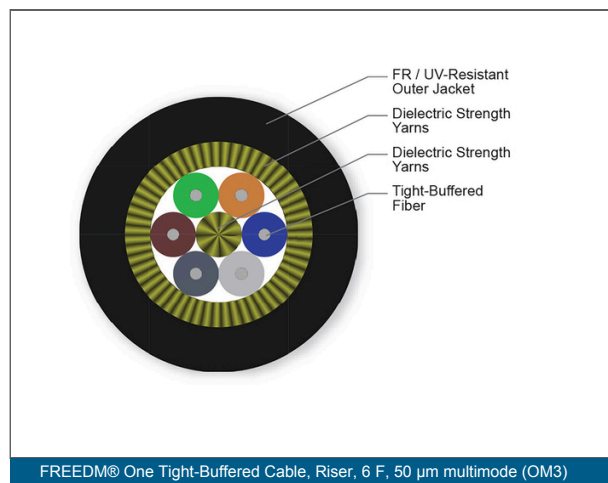
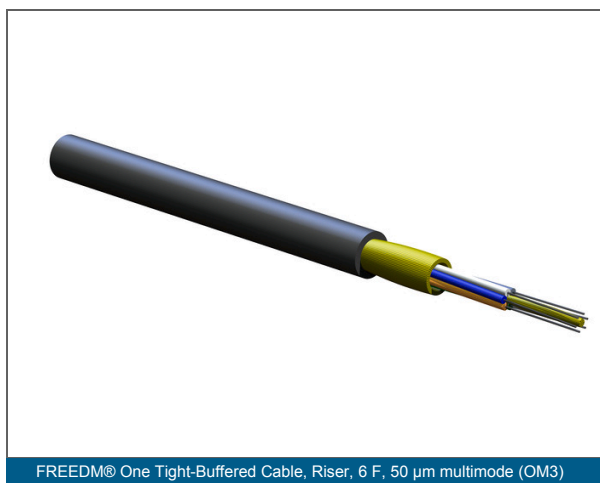
Quick and easy identification

### **All-dielectric construction**

Requires no grounding or bonding

### **UV-resistant, flame-retardant jacket**

Rugged, durable and easy to strip



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## Specifications

### General Specifications

Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	50 µm MM (OM3)
Flame Rating	Riser (OFNR)
Application	Aerial, Duct, General purpose, Horizontal, Vertical Riser
Cable geometry	Round

### Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Approvals and Listings	National Electrical Code® (NEC®) OFNR, UL-1666, CSA OFN FT-4
Design and Test Criteria	ICEA S-104-696

### Environmental Conditions

Temperature Range, Installation	-10 °C to 60 °C (14 °F to 140 °F )
Temperature Range, Operation	-40 °C to 70 °C (-40 °F to 158 °F )
Temperature Range, Storage	-40 °C to 70 °C (-40 °F to 158 °F )

### Cable Design

Central Element	Dielectric
Fiber Count	6
Outer Jacket Color	Black
Outer Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 1	Water-swellable strength members
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White

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## Cable Design

Flame Rating	Riser (OFNR)
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## Mechanical Specifications

Max. Tensile Strength, Long-Term	200 N (44.96 lbf)
Max. Tensile Strength, Short-Term	675 N (151.75 lbf)
Min. Bend Radius Installation	82.5 mm (3.25 in)
Min. Bend Radius Operation	55 mm (2.17 in)
Nominal Outer Diameter	5.5 mm (0.22 in)

## Optical Characteristics

Fiber Code	T
Fiber Type	Multimode
Performance Option Code	80
Fiber Core Diameter	50 µm
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Serial 1 Gigabit Ethernet	1000 MHz*km / 600 MHz*km
Serial 10 Gigabit Ethernet	300 MHz*km / -
Wavelengths	850 nm / 1300 nm
Fiber Category	OM3

## Dimensions

Cable Weight	26 kg/km (17.47 lb/1000 ft)
Length	0 mm (0 in)

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