

# FREEDM® One Unitized, Tight-Buffered Cable, Riser

48 F, 50 µm multimode (OM2)

CORNING

Corning FREEDM® One unitized 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. Available in fiber counts up to 144 fibers, the tight-buffered construction facilitates easy termination for high-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.

Available in 50 µm, 62.5 µm, single-mode and hybrid versions, the cable design meets ICEA S-104-696 test criteria and is also OFNR and FT-4 listed for riser and general purpose use. 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 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. This cable is also available with interlocking armor for special applications requiring additional mechanical durability.

*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

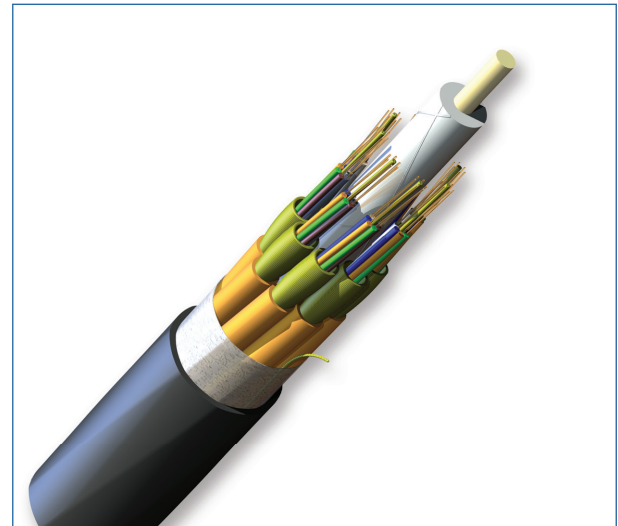
Quick and easy identification

### All-dielectric construction

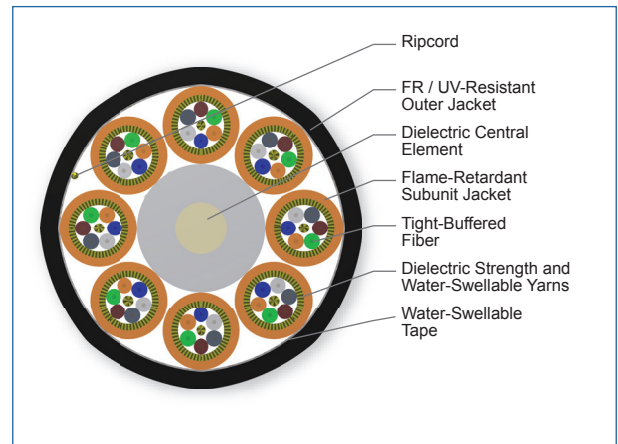
Requires no grounding or bonding

### UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



Part Number: 048T8F-61131-29



Cross Section of Part Number: 048T8F-61131-29

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## Standards

**Listings** National Electrical Code<sup>®</sup>  
(NEC<sup>®</sup>) OFNR, FT-4

**Design and Test Criteria** ICEA S-104-696

## Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Direct Buried, Duct, General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	50 µm MM (OM2)

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	48
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White
Number of Active Tubes	8
Subunit Color	Orange
Number of Fibers per Subunit	6
Subunit Diameter	4.40 mm (0.17 in)
Tape	Water-swellable
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

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## Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Weight	270.5 kg/km (181.8 lb/1000 ft)
Nominal Outer Diameter	18.6 mm (0.73 in)
Min. Bend Radius Installation	279.0 mm (11.0 in)
Min. Bend Radius Operation	186 mm (7.3 in)

## 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	OM2
Fiber Code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	750 m / 600 m
Serial 10 Gigabit Ethernet	150 m / -
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -

## Ordering Information

Part Number	048T8F-61131-29
Product Description	FREEDM® One Unitized Tight-Buffered Cable, Riser, 48 F, 50 µm multimode (OM2)
EAN Code	4056418172804

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The CORNING logo is a blue square with the word "CORNING" in white, uppercase, sans-serif font centered inside.

## *Notes*



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