

# FREEDM® One Tight-Buffered Cable, Riser

4 F, Single-mode (OS2)

CORNING

Corning FREEDM® One riser cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial, duct and direct-buried 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 TBII® 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

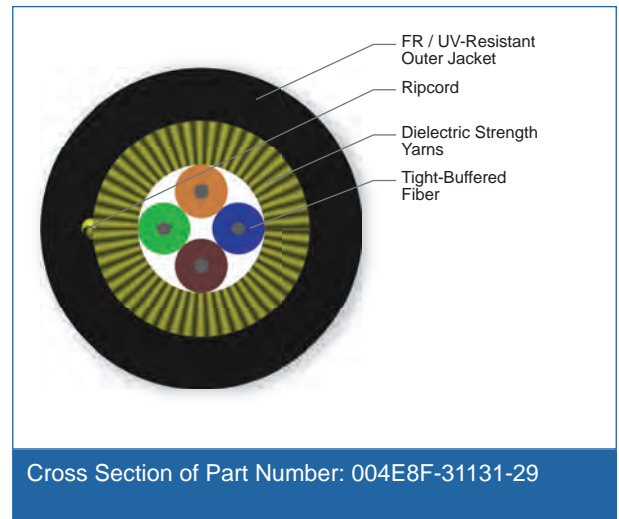
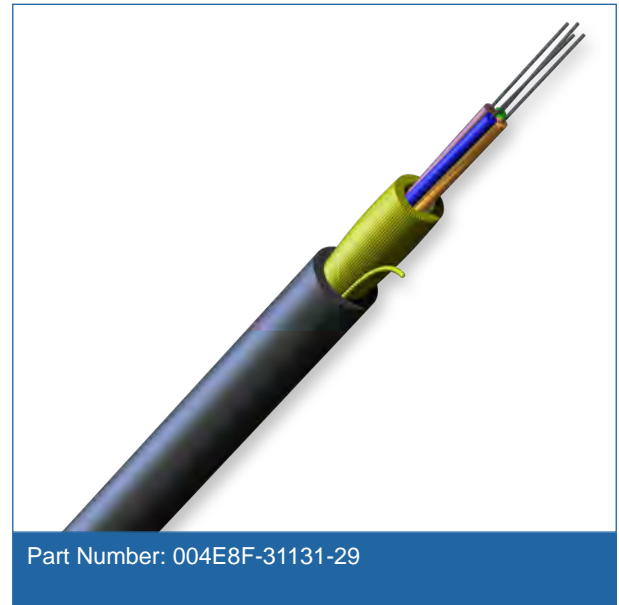
### UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

## Standards

**Approval and Listings** National Electrical Code® (NEC®) OFNR, FT-4

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



# FREEDM<sup>®</sup> One Tight-Buffered Cable, Riser

4 F, Single-mode (OS2)

CORNING

## Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Tight-Buffered
Product Type	Dielectric
Flame Rating	Riser (OFNR)
Fiber Category	Single-mode (OS2)

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	4
Tight Buffer Color	Blue, Orange, Green, Brown
Tensile Strength Elements and/or Armoring - Layer 1	Water-Swellable Strength Yarns
Number of Ripcords	1
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Weight	24 kg/km (16 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	28 mm (1.1 in)
Max. Tensile Strength, Short-Term	675 N (150 lbf)
Max. Tensile Strength, Long-Term	200 N (45 lbf)

# FREEDM<sup>®</sup> One Tight-Buffered Cable, Riser

4 F, Single-mode (OS2)



## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
------	---

## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Name	SMF-28e <sup>®</sup> fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	31
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.65 dB/km / 0.65 dB/km / 0.50 dB/km

## Ordering Information

Part Number	004E8F-31131-29
Product Description	FREEDM <sup>®</sup> One Tight-Buffered Cable, Riser, 4 F, Single-mode (OS2)



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)

A complete listing of the trademarks of Corning Optical Communications is available at [www.corning.com/opcomm/trademarks](http://www.corning.com/opcomm/trademarks). Corning Optical Communications is ISO 9001 certified. © 2014 Corning Optical Communications. All rights reserved.

