2 F, Single-mode (OS2)

CORNING

Corning Cable Systems FREEDM® Fan-Out Cables are designed for routing inside and outside buildings into riser spaces, to security, surveillance or monitoring cameras, and within workstations. With no need for transition splices when entering a building, this cable solution provides low-fiber-count connections within building backbone riser and horizontal spaces. The indoor/outdoor temperature and water-resistant performance provides superior protection for applications, like traffic control, with optical feeds in rugged environments.

Ideal for providing direct optical connections from indoor and outdoor surveillance cameras to security control locations, these cables can also provide a secure link for surveillance or data. The flame-retardant, 900  $\mu m$  TBII Buffered Fibers are available in single-mode and multimode and enable easy, consistent stripping while the 2.0 mm subunits enable easy field terminations.

The fibers are surrounded by water-resistant, dielectric strength members and protected by a flexible, flame-retardant outer jacket. These cables meet the application requirements of the National Electrical Code® (NEC® Article 770) and are OFNR and FT-4 listed and comply with the ICEA S-104-696 tests. The all-dielectric cable construction requires no grounding or bonding and the small diameter and bend radius allow easy installation in space-constrained areas. FREEDM Fan-Out Cables are also available with approval for TEMPEST applications.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, 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 standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

#### **Features and Benefits**

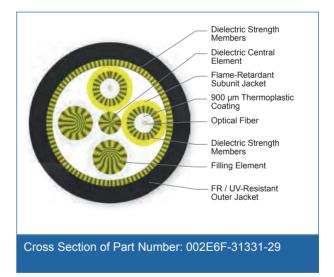
900 µm TBII® Buffered Fibers Easy, consistent stripping

**2.0 mm subunits**Easy field terminations

Flame-retardant jacket Rugged and durable

**Temperature- and water-resistant**Superior protection





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#### **Features and Benefits**

**All-dielectric construction** 

Requires no grounding or bonding

#### **Standards**

Approval and Listings National Electrical Code®

(NEC®) OFNR, CSA OFN

FT-4

Design and Test Criteria ICEA S-104-696

Flame Resistance UL-1666 (for riser and gen-

eral building applications)

### **Specifications**

General Specifications	
Environment	Indoor/Outdoor Cables
Application	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 70 °C (14 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	2
Fiber Coloring	Yellow
Fibers per Tube	1
Number of Tube Positions	4
Number of Active Tubes	2



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Cable Design	
Buffer Tube Color Coding	Yellow
Buffer Tube Diameter	2.0 mm (0.08 in)
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	660 N (150 lbf)
Max. Tensile Strengths, Long-Term	330 N (75 lbf)
Weight	39 kg/km (86 lb/1000 ft)
Nominal Outer Diameter	6.8 mm (0.27 in)
Min. Bend Radius Installation	102 mm (4.1 in)
Min. Bend Radius Operation	68 mm (2.7 in)

s substances according to RoHS 2002/95/
-

## Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	62.5 μm
Fiber Type	Multimode
Fiber Category	OM1
Fiber Code	K
Performance Option Code	30
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -
Serial 1 Gigabit Ethernet	300 m / 550 m
Serial 10 Gigabit Ethernet	33 m / -

Notes: 1) Improved attenuation and bandwidth options available.

2) Bend-insensitive single-mode fibers available on request.

3) Contact a Corning Cable Systems Customer Care Representative for additional information.



2 F, Single-mode (OS2)



### **Ordering Information**

Part Number	002E6F-31331-29
Product Description	FREEDM® Fan-Out Tight-Buffered Cable, Riser, 2 F, Singlemode (OS2)



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