4 F, 50 µm multimode (OM2)



Reel in a Box is Corning's innovative packaging solution for small reels of fiber optic cable in all inside plant applications, such as collocation data centers and wireless projects. This packaging solution provides features that enable our customers greater efficiencies than before.

Corning FREEDM® fan-out cables are designed for routing inside and outside buildings into riser spaces, to security, surveillance or monitoring cameras, and within telecommunications rooms and workstations. With no need for transition splices when entering a building, this cable 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.

#### **Features and Benefits**

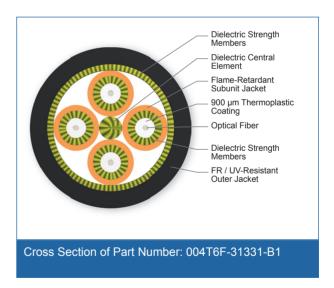
"Countdown" print indicates available cable remaining on the reel providing easier inventory management

Stackable boxes make storage more manageable

Smaller reel offerings mean smaller cable lengths than would normally be available

Cable cutting at Corning lowers operating expenses for our distributors and end users







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#### Standards

Approvals 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 general building applications)

### **Specifications**

General Specifications	
Environment	Indoor/Outdoor
Application	Direct Buried, Duct, General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Dielectric
Flame Rating	Riser (OFNR)
Fiber Category	50 μm MM (OM2)
Fiber Length	150 m (500 ft)

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	4
Fiber Coloring	Orange
Fibers per Tube	1
Number of Tube Positions	4
Number of Active Tubes	4
Buffer Tube Color Coding	Orange
Buffer Tube Diameter	2.0 mm (0.08 in)
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black



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Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	660 N (150 lbf)
Max. Tensile Strength, 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)

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

### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM2
Fiber Code	Т
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	004T6F-31331-B1
Product Description	Reel in a Box, FREEDM® Fan-Out Tight-Buffered Cable, Riser, 4 F, 50 µm multimode (OM2)

#### **Shipping Information**

Packaging Method	Reel In A Box
Dimensions (HxWxD)	39.37 cm x 39.37 cm x 38.73 cm (15.5 in x 15.5 in x 15.25 in)



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**Notes** 



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