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

2 F, 62.5 µm multimode (OM1)

### CORNING

Corning FREEDM® One interlocking armored cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbone installations that eliminate the need for a transition splice when entering the building. Encased in a spirally wrapped, aluminum interlocking armor for ruggedness and superior crush resistance, these cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables. These cables are protected against water penetration by innovative waterblocking technology, making them ideal for OSP applications. The flexible, interlocking armored design offers up to seven times the crush protection compared to unarmored cables (as characterized to ICEA-696) and allows easy one-step installation, thereby reducing overall installation costs. 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

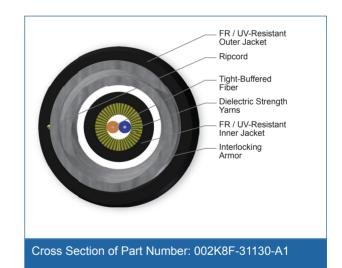
Flexible, interlocking armor design Seven times crush protection compared to unarmored cables

UV-resistant, flame-retardant jacket Rugged, durable and easy to strip

#### Standards

Approvals and Listings	National Electrical Code <sup>®</sup> (NEC <sup>®</sup> ) OFCR, CSA FT-4, ICEA S104-696
Flame Resistance	UL-1666 (for riser and ge- neral building applications)





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## Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Tight-Buffered
Product Type	Interlocking armor
Flame Rating	Riser (OFCR)
Fiber Category	62.5 µm MM (OM1)

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	2
Tight Buffer Color	Blue, Orange
Tensile Strength Elements and/or Armoring - Layer 1	Water-Swellable Strength Yarns
Inner Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 2	Interlocking armor
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

#### Mechanical Characteristics Cable

Nominal Inner Cable Diameter	5.2 mm (0.20 in)
Nominal Outer Diameter	11.3 mm (0.44 in)
Weight	95.4 kg/km (64.1 lb/1000 ft)
Min. Bend Radius Installation	169.5 mm (6.7 in)
Min. Bend Radius Operation	113 mm (4.4 in)
Max. Tensile Strength, Short-Term	675 N (150 lbf)
Max. Tensile Strength, Long-Term	200 N (45 lbf)

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

 Notes:
 1) Improved attenuation and bandwidth options available.

 2) Bend-insensitive single-mode fibers available on request.
 3) Contact a Corning Customer Care Representative for additional information.

## **Ordering Information**

Part Number	002K8F-31130-A1
Product Description	FREEDM <sup>®</sup> One Tight-Buffered, Interlocking Armored Cable, Riser, 2 F, 62.5 μm multimode (OM1)
EAN Code	4056418149677



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