# FREEDM<sup>®</sup> Ribbon Interlocking Armored, Gel-Filled Cable, Riser

48 F, Single-mode (OS2)

# CORNING

Corning FREEDM® ribbon interlocking armored, gel-filled riser cables continue the innovative breakthrough in indoor/outdoor cable technology with a new generation of high-fiber-count single tube cables. These cables are designed to maximize the use of critical duct space with excellent installation results. Encased in spirally -wrapped aluminum interlocking armor for ruggedness and superior crush resistance, the cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables. The UV-resistant, flame-retardant jacket allows this cable to be installed outdoors or in indoor general purpose horizontal and riser applications. The cable employs a single buffer tube containing a stack of 12 fiber ribbons within a gel-filled central buffer tube.

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

Precise fiber and ribbon geometries Excellent mass splicing yields

Waterblocked cable Enables use of cables for outdoor applications

**12-fiber ribbons with ribbon IDs** Easy identification

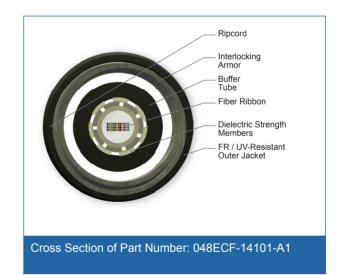
UV-resistant, flame-retardant jacket Rugged, durable and easy to strip

Flexible interlocking armor Up to seven times the crush protection compared to non-armored cables

#### Common installations

Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770





### Standards

Listings	National Electrical Code <sup>®</sup> (NEC <sup>®</sup> ) OFNR
Design Criteria	CSA OFN FT-4



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#### Standards

Test Criteria

ANSI/ICEA S-104-696

## Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Ribbon
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	
Fiber Count	48
Ribbons per Tube	4
Fibers per Ribbon	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Color	Natural
Buffer Tube Diameter	5.6 mm (0.22 in)
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Таре	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
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	600 N (135 lbf)
Weight	277 kg/km (185.59 lb/1000 ft)
Nominal Outer Diameter	19.3 mm (0.76 in)
Min. Bend Radius Installation	289.5 mm (11.4 in)
Min. Bend Radius Operation	193 mm (7.6 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

#### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Name	Single-mode (OS2)
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	01
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km

### **Ordering Information**

Part Number	048ECF-14101-A1
Product Description	FREEDM <sup>®</sup> Ribbon Interlocking Armored, Gel-Filled Cable, Riser, 48 F, Single-mode (OS2)
EAN Code	4056418164274



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