FREEDM® Ribbon, Gel-Filled Cable, Riser

72 F, Single-mode (OS2)

CORNING

Corning Cable Systems FREEDM® Ribbon Riser Cables are lightweight cables designed for indoor/outdoor installations such as campus backbones in aerial, duct and riser applications. A UV-resistant, flame-retardant jacket allows added flexibility in placing this cable outdoors, whether it is an aerial, duct or direct-buried application, or indoor general horizontal or riser applications. The cable consists of a ribbon stack of 12-fiber ribbons within a gel-filled central buffer tube. With easily accessible individual 250 μm colored fibers, the ribbons have readily identifiable ribbon ID numbers and fiber colors. The precise fiber and ribbon geometries result in excellent mass splicing yields. Surrounding the tube are dielectric strength members that provide tensile strength and innovative waterblocking tapes that reduce cable preparation time and weight. This design is also compatible with standard ribbon cable procedures and hardware for easy field installation and reduced labor costs.

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.

Part Number: 072ECF-14101-20

Features and Benefits

Precise fiber and ribbon geometries
Excellent mass splicing yields

Waterblocked cable
Enables use of indoor/outdoor cables

12-fiber ribbons with ribbon IDs
Easy identification

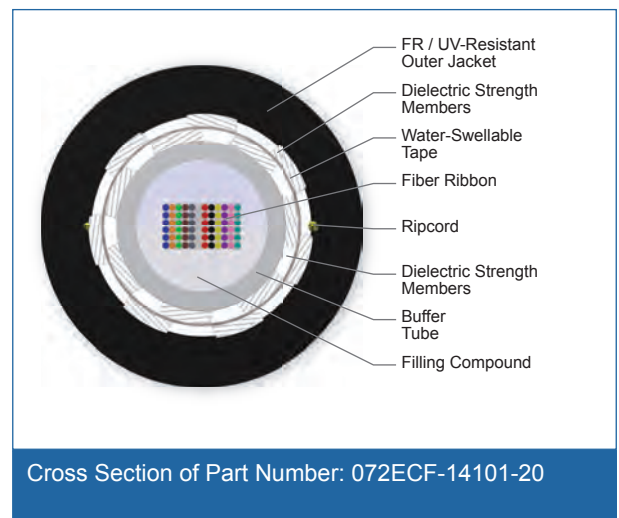**UV-resistant, flame-retardant jacket**
Rugged, durable and easy to strip

Available in preconnectorized assemblies
Easy field installation and reduced labor costs

FR / UV-Resistant Outer Jacket
Dielectric Strength Members
Water-Swellable Tape
Fiber Ribbon
Ripcord
Dielectric Strength Members
Buffer Tube
Filling Compound

Cross Section of Part Number: 072ECF-14101-20

Standards

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

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Standards

Common Installations	Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770
Design and 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	72
Ribbons per Tube	6
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	6.7 mm (0.26 in)
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tape	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Number of Ripcords	2

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Cable Design

Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable

Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	600 N (135 lbf)
Weight	174 kg/km (117 lb/1000 ft)
Nominal Outer Diameter	12.7 mm (0.51 in)
Min. Bend Radius Installation	191 mm (7.5 in)
Min. Bend Radius Operation	127 mm (5 in)

Chemical Characteristics

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

Fiber Specifications

Optical Characteristics (cabled)

Fiber Type	Single-mode
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
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
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m

* ITU-T G.652 D compliant.
* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

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.*

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Ordering Information

Part Number	072ECF-14101-20
Product Description	FREEDM® Ribbon, Gel-Filled Cable, Riser, 72 F, Single-mode (OS2)

RoHS COMPLIANT

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