

FREEDM® Ribbon Riser Cables

CORNING

Features and Benefits

Precise fiber and ribbon geometries

Excellent mass splicing yields

Waterblocked cable

Enables use of cables for outdoor applications

Ribbon ID numbers and fiber colors

Easily identifiable

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

Standards

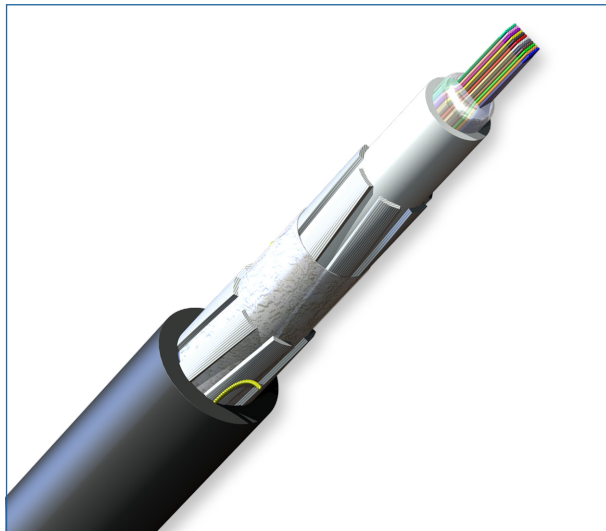
Approval and Listings	National Electrical Code® (NEC®) OFNR, CSA OFN FT-4
-----------------------	---

Common Installations	Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770
----------------------	--

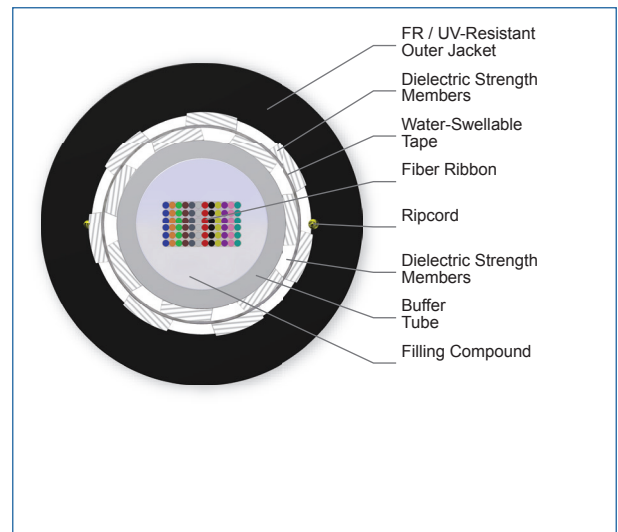
Design and Test Criteria	ANSI/ICEA S-104-696
--------------------------	---------------------

Corning 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 weight and preparation time. This design is also compatible with standard ribbon cable procedures and hardware for easy field installation and reduced labor costs.



FREEDM Ribbon Riser Cables, 72 Fibers
| Photo PIM0834

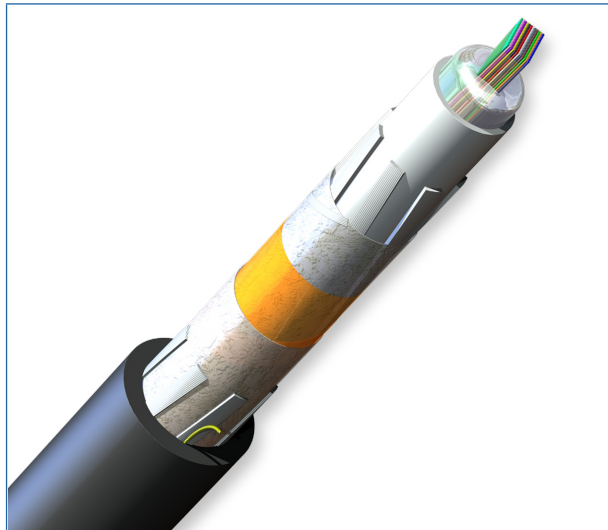


FREEDM Ribbon Riser Cables, 72 Fibers | Photo PIM1734

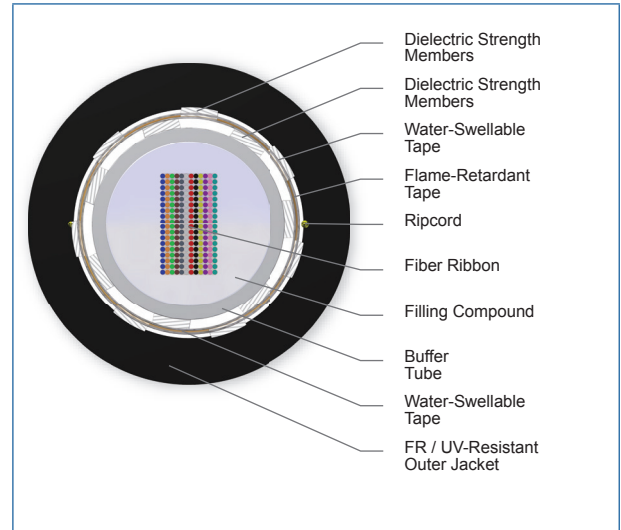
CORNING

FREEDM® Ribbon Riser Cables

CORNING



FREEDM Ribbon Riser Cables, 216 Fibers
| Photo PIM0837



FREEDM Ribbon Riser Cables, 216 Fibers
| Photo PIMtbd

Specifications

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)

* Note: Corning recommends storing indoor/outdoor cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	600 N (135 lbf)

Mechanical Characteristics Cable					
Fiber Count	Product Type	Nominal Outer Diameter	Weight	Min. Bend Radius Installation	Min. Bend Radius Operation
12 - 48	Dielectric	12.0 mm (0.47 in)	141 kg/km (94 lb/1000 ft)	180 mm (7.1 in)	120 mm (4.7 in)
72 - 96	Dielectric	12.7 mm (0.50 in)	157 kg/km (105 lb/1000 ft)	191 mm (7.5 in)	127 mm (5 in)
144	Dielectric	13.6 mm (0.54 in)	175 kg/km (118 lb/1000 ft)	204 mm (8.0 in)	136 mm (5.4 in)
216	Dielectric	17.6 mm (0.69 in)	286 kg/km (192 lb/1000 ft)	264 mm (10.4 in)	176 mm (6.9 in)

CORNING

FREEDM® Ribbon Riser Cables

CORNING

Chemical Characteristics

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

Transmission Performance

Multimode					
Fiber Core Diameter (µm)	62.5	50	50	50	50
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance
Fiber Code	K	T	T	T	T
Performance Option Code	30	31	80	90	91
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-	600/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-	5350/-

* Single-mode (OS2) fiber is ITU-T G.652.D compliant.

* 50 µm multimode fiber (OM3/OM4) meets 0.75 ns optical skew when used in all Corning Plug and Play™/Pretium EDGE® systems solutions.

* 50 µm multimode fiber (OM4) T90 10 Gigabit Ethernet distance assumes 1.0 dB maximum total connector/splice loss.

* 50 µm multimode fiber (OM4) T91 10 Gigabit Ethernet Distance assumes 0.7 dB maximum total connector/splice loss.

Notes: 1) Improved attenuation and bandwidth options available.

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

3) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

4) Contact a Corning Customer Care Representative for additional information.

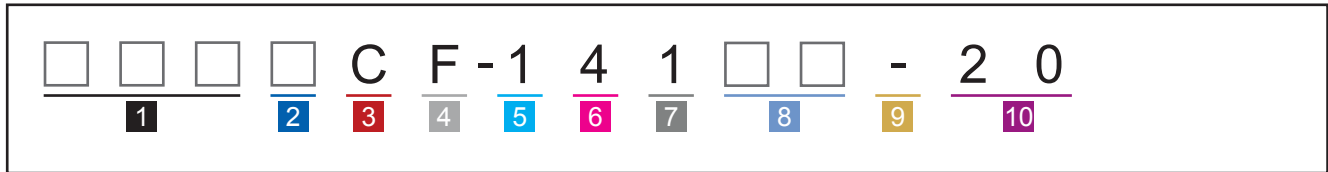
Single-mode

Fiber Name	SMF-28e+® fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	01
Wavelengths (nm)	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.3
Typical Attenuation* (dB/km)	0.33/0.33/0.19

FREEDM® Ribbon Riser Cables

CORNING

Ordering Information | Note: Contact Customer Care at 1-800-743-2675 for other options.



1 Select fiber count.

Standard offerings:
012 036 072 144
024 048 096 216

2 Select fiber code.

K = 62.5 μm multimode (OM1)
T = 50 μm multimode,
(OM2/OM3/OM4/OM4+)
E = Single-mode (OS2)
SMF-28e+®

3 Defines cable type.

C = FREEDM® Ribbon Cable

4 Defines outer jacket.

F = Indoor/outdoor riser

5 Defines fiber placement.

1 = 12 fibers/buffer tube
(standard)

6 Defines length markings.

4 = Markings in ft (standard)

7 Defines tensile strength.

1 = See Specifications

8 Select performance option code.

30 = 62.5 μm multimode (OM1)
31 = 50 μm multimode (OM2)
80 = 50 μm multimode (OM3)
90 = 50 μm multimode (OM4)
91 = 50 μm multimode (OM4+)
01 = Single-mode (OS2)

(Max. attenuation 0.4/0.4/0.3 dB/km)

9 Defines cable type.

- = FREEDM® Ribbon Cable

10 Defines special manufacturing code.

20 = Standard

Note: This cable is available in 12 different jacket colors: blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. Black is the standard jacket color using the part number configurator above. Contact Customer Care at 1-800-743-2675 to order other color options.



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. Corning Optical Communications is ISO 9001 certified. © 2014 Corning Optical Communications. All rights reserved.

CORNING