FREEDM UltraRibbon Gel-Filled Cable, Riser

Corning FREEDM UltraRibbon riser cables provide the ultimate solution for indoor/outdoor high-fiber-count applications. The smallest and lightest in the industry, these cables are designed to maximize the use of critical duct space with excellent installation results. The UV-resistant, flame-retardant jacket allows this cable to be installed outdoors or in indoor general purpose horizontal and riser applications. FREEDM UltraRibbon riser cables employ a single buffer tube containing a stack of 24- and 36-fiber ribbons that are easily separated by hand into two or three 12-fiber ribbons respectively. This cable is also available with interlocking armor for additional mechanical durability.

Features and Benefits

Precise fiber and ribbon geometries
Excellent mass splicing yields

Waterblocked cable
Enables use of cables for outdoor applications

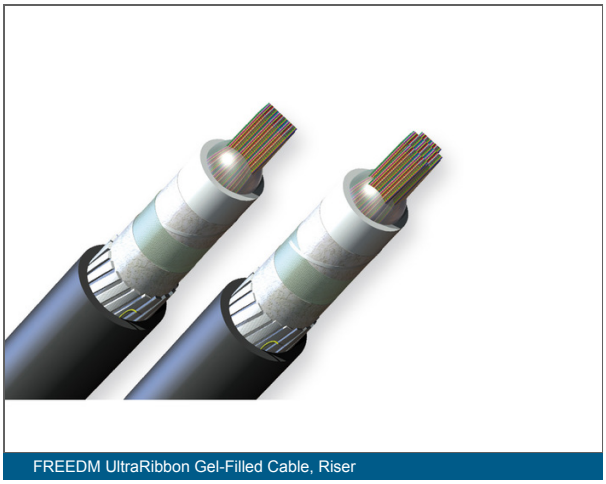
12-fiber ribbons with ribbon IDs
Easy identification

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

Available in preconnectorized assemblies
Easy field installation and reduced labor costs

504-864 fibers in a compact design
Maximizes use of critical duct space

Common installations
Outdoor aerial and duct



FREEDM UltraRibbon Gel-Filled Cable, Riser

FREEDM UltraRibbon Gel-Filled Cable, Riser

Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Specifications

General Specifications	
Environment	Indoor/Outdoor
Product Type	Dielectric
Cable Type	Ribbon
Flame Rating	Riser (OFNR)

Temperature Range	
Temperature Range, Storage	-40 °C - 70 °C (-40 °F - 158 °F)
Temperature Range, Installation	-10 °C - 60 °C (14 °F - 140 °F)
Temperature Range, Operation	-40 °C - 70 °C (-40 °F - 158 °F)

Design Characteristics Cable			
Fiber Count	Buffer Tube Diameter	Ribbons per Tube	Fibers per Ribbon
504	179 mm (7.05 in)	14	36
576	179 mm (7.05 in)	6 and 12	24 and 36
576	179 mm (7.05 in)	6 and 12	36 and 24
576	179 mm (7.05 in)	12 and 6	36 and 24
576	179 mm (7.05 in)	12 and 6	24 and 36
576	179 mm (7.05 in)	12 and 6	36 and 24
648	179 mm (7.05 in)	6 and 14	36 and 24
648	179 mm (7.05 in)	6 and 14	24 and 36
648	179 mm (7.05 in)	6 and 14	36 and 24
648	179 mm (7.05 in)	14 and 6	24 and 36

FREEDM UltraRibbon Gel-Filled Cable, Riser

CORNING

Design Characteristics Cable			
Fiber Count	Buffer Tube Diameter	Ribbons per Tube	Fibers per Ribbon
648	179 mm (7.05 in)	6 and 14	36 and 24
720	179 mm (7.05 in)	12 and 12	24 and 36
720	179 mm (7.05 in)	12 and 12	36 and 24
720	179 mm (7.05 in)	12 and 12	24 and 36
720	179 mm (7.05 in)	12 and 12	36 and 24
864	179 mm (7.05 in)	16 and 12	24 and 36
864	179 mm (7.05 in)	12 and 16	36 and 24
864	179 mm (7.05 in)	12 and 16	24 and 36
864	179 mm (7.05 in)	16 and 12	24 and 36

Mechanical Characteristics Cable						
Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Cable Weight
504	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	564 kg/km (378.99 lb/ 1000 ft)
504	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	564 kg/km (378.99 lb/ 1000 ft)
504	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	810 N (182.1 lbf)	890 N (200.08 lbf)	564 kg/km (378.99 lb/ 1000 ft)
504	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	564 kg/km (378.99 lb/ 1000 ft)
576	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	567 kg/km (381.01 lb/ 1000 ft)
576	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	810 N (182.1 lbf)	890 N (200.08 lbf)	567 kg/km (381.01 lb/ 1000 ft)
576	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	567 kg/km (381.01 lb/ 1000 ft)

FREEDM UltraRibbon Gel-Filled Cable, Riser

Mechanical Characteristics Cable						
Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Cable Weight
648	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	569 kg/km (382.35 lb/ 1000 ft)
648	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	810 N (182.1 lbf)	890 N (200.08 lbf)	569 kg/km (382.35 lb/ 1000 ft)
720	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	572 kg/km (384.37 lb/ 1000 ft)
720	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	810 N (182.1 lbf)	890 N (200.08 lbf)	572 kg/km (384.37 lb/ 1000 ft)
720	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	572 kg/km (384.37 lb/ 1000 ft)
864	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	577 kg/km (387.73 lb/ 1000 ft)
864	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	810 N (182.1 lbf)	890 N (200.08 lbf)	577 kg/km (387.73 lb/ 1000 ft)
864	25.4 mm (1 in)	381 mm (15 in)	254 mm (10 in)	890 N (200.08 lbf)	890 N (200.08 lbf)	577 kg/km (387.73 lb/ 1000 ft)

Transmission Performance

Multimode			
Fiber Category	OM3	OM4	OM4 Extended Distance
Fiber Code	T	T	T
Performance Option Code	80	90	91
Fiber Core Diameter	50 µm	50 µm	50 µm
Wavelengths	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km

Multimode			
Serial 1 Gigabit Ethernet	1000 m / 600 m	1000 m / 600 m	1100 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -	550 m / -	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / - 500 MHz*km	3500 MHz*km / 500 MHz*km	
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -	4700 MHz*km / -	5350 MHz*km / -

Transmission Performance

Single-mode	
Fiber Name	Single-mode (OS2) - Bend-Improved Single-mode (OS2)
Performance Option Code	01
Fiber Category	OS2
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Code	E - Z
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km

FREEDM UltraRibbon Gel-Filled Cable, Riser

CORNING

□ □ □ □ V F - 1 4 1 □ □ - 2 0
1 2 3 4 5 6 7 8 9 10

1 Select fiber count.
Standard offerings:
504 648 864
576 720

2 Select fiber code.
T = 50 µm multimode, (OM3/OM4/OM4+)
E = Single-mode (OS2) SMF-28e+®
Z = Single-mode (OS2) SMF-28® Ultra fiber

3 Defines cable type.
V = UltraRibbon cable

4 Defines outer jacket.
F = Indoor/outdoor riser

5 Defines fiber placement.
1 = 24 fibers/ribbon

6 Defines length markings.
4 = Markings in ft (standard)

7 Defines tensile strength.
1 = See specifications

8 Select performance option code.
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.
– = Gel-filled cable

10 Defines special manufacturing code.
20 = Standard

RoHS COMPLIANT

Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm