

FREEDM® UltraRibbon™ Riser, Gel-Free, Interlocking Armored Cable

864 F, SMF-28® Ultra fiber, Single-mode (OS2)



Corning's FREEDM® UltraRibbon™ interlocking armored cables provide the ultimate high-fiber count solution for indoor/outdoor 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 indoor 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. The interlocking armor feature allows for added 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, indoor/outdoor jacket that is easy to strip

Available in preconnectorized assemblies

Easy field installation and reduced labor costs

864 fibers in a compact design

Maximizes use of critical duct space

Flexible interlocking armor

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

Standards

Approvals and Listings

National Electrical Code®
(NEC®) OFCR

Design and Test Criteria

ANSI/ICEA S-104-696,
Telcordia GR-409, UL-1666,
CSA FT-4

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Specifications

General Specifications	
Environment	Indoor/Outdoor
Application	Aerial, Direct Buried, Duct, Vertical Riser
Cable Type	Ribbon
Product Type	Interlocking Armor
Flame Rating	Riser (OFCR)
Fiber Category	SMF-28® Ultra fiber

Temperature Range	
Storage	-50 °C to 70 °C (-58 °F to 158 °F)
Installation	-30 °C to 60 °C (-22 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Fiber Count	864
Ribbons per Tube	12 and 16
Fibers per Ribbon	24 and 36
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Diameter	18.1 mm (0.7 in)
Buffer Tube Color	Natural
Strength Elements and/or Armoring Layer 1	Dielectric strength members
Tape	Water-swellable
Tape, Layer 2	Waterblocking foam tape
Number of Ripcords	2
Outer Jacket Material	Flame-retardant, non-corrosive/low-smoke, zero-halogen, UV-Resistant
Outer Jacket Color	Black
Cable Marking	Print in Feet

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Nominal Outer Diameter	32.5 mm (1.28 in)
Min. Bend Radius Installation	487.5 mm (19.19 in)

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Mechanical Characteristics Cable

Min. Bend Radius Operation	325 mm (12.80 in)
Weight	716.60 kg/km (481.533 lb/1000 ft)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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Fiber Specifications

Optical Characteristics (cabled)

Fiber Name	SMF-28® Ultra Fiber
Fiber Category	G.657.A1
Fiber Code	Z
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
Typical Attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

Ordering Information

Part Number	864ZVF-14101DA1
Product Description	FREEDM® UltraRibbon™ Riser, Gel-Free, Interlocking Armored Cable, 864 F, SMF-28® Ultra Fiber



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