

# FREEDM® UltraRibbon™ Gel-Filled Cable, Riser

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

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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; indoor general purpose horizontal according to NEC Article 770

## Standards

### Listings

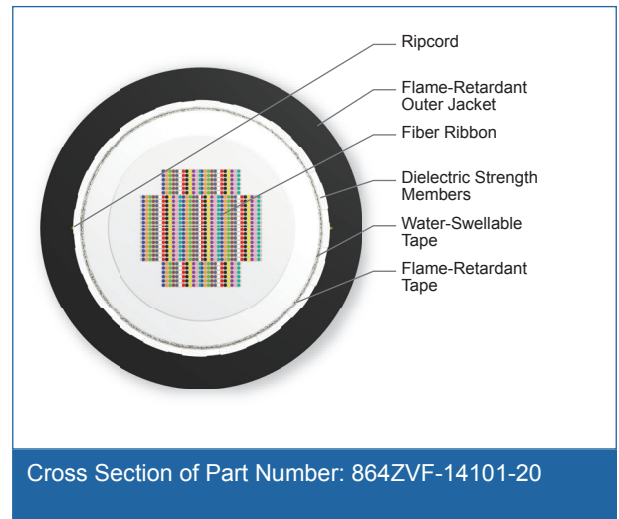
National Electrical Code® (NEC®) OFNR

### Design Criteria

CSA OFN FT-4

### Test Criteria

ANSI/ICEA S-104-696, Telcordia GR-409 and GR-20



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## Specifications

| General Specifications |   |
|------------------------|---|
| Environment            | Indoor/Outdoor  |
| Application            | Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser) |
| Cable Type             | Ribbon  |
| Product Type           | Dielectric  |
| Flame Rating           | Riser (OFNR)  |
| Fiber Category         | SMF-28® Ultra fiber   |

| 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   | 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 Color                                   | Natural  |
| Buffer Tube Diameter                                | 17.9 mm (0.7 in)   |
| Tensile Strength Elements and/or Armoring - Layer 1 | Dielectric strength members  |
| Tape  | Water-Swellable  |
| Tape, Layer 2                                       | Flame-retardant tape   |
| Tape, Layer 3                                       | Water-Swellable  |
| Number of Ripcords                                  | 2  |
| Outer Jacket Material                               | Flame-Retardant, UV-Resistant  |
| Outer Jacket Color                                  | Black  |

| Mechanical Characteristics Cable  |                  |
|-----------------------------------|------------------|
| Max. Tensile Strength, Short-Term | 2700 N (600 lbf) |
| Max. Tensile Strength, Long-Term  | 890 N (200 lbf)  |
| Nominal Outer Diameter            | 25.4 mm (1.0 in) |

# FREEDM<sup>®</sup> UltraRibbon<sup>™</sup> Gel-Filled Cable, Riser

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## Mechanical Characteristics Cable

|                               |                            |
|-------------------------------|----------------------------|
| Min. Bend Radius Installation | 381 mm (15 in)             |
| Min. Bend Radius Operation    | 254 mm (10 in)             |
| Weight                        | 577 kg/km (387 lb/1000 ft) |

## Chemical Characteristics

|      |   |
|------|---|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
|------|---|

## Fiber Specifications

### Optical Characteristics (cabled)

|                         |                                      |
|-------------------------|--------------------------------------|
| Fiber Name              | SMF-28 <sup>®</sup> Ultra fiber      |
| Fiber Category          | ITU-T 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 |

\* For more information on typical attenuation please see the Corning whitepaper at [http://csmedia.corning.com/opcomm//Resource\\_Documents/whitepapers\\_r/ LAN-1863-AEN.pdf](http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_r/ LAN-1863-AEN.pdf)

## Ordering Information

|                     |   |
|---------------------|---|
| Part Number         | 864ZVF-14101-20   |
| Product Description | FREEDM <sup>®</sup> UltraRibbon <sup>™</sup> Gel-Filled Cable, Riser, 864 F, SMF-28 <sup>®</sup> Ultra fiber, Single-mode (OS2) |
| EAN Code            | 4056418139418   |



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