

# FREEDM® UltraRibbon™ Gel-Filled Cable, Riser

504 fibres, 50 µm multimode (OM4)

CORNING

Corning FREEDM® UltraRibbon™ riser cables provide the ultimate solution for indoor/outdoor high-fibre-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-fibre ribbons that are easily separated by hand into two or three 12-fibre ribbons respectively. This cable is also available with interlocking armor for additional mechanical durability.

## Features and Benefits

### Precise fibre and ribbon geometries

Excellent mass splicing yields

### Waterblocked cable

Enables use of indoor/outdoor cables

### 12-fibre ribbons with ribbon IDs

Easy identification

### UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

### Available in preconnectorized assemblies

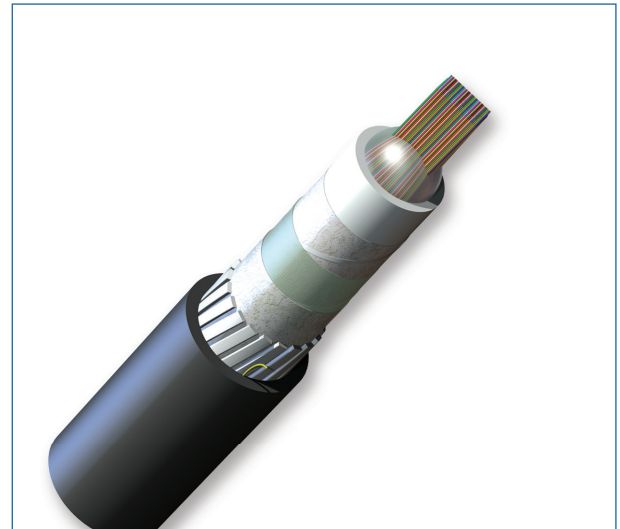
Easy field installation and reduced labor costs

### 504-864 fibres in a compact design

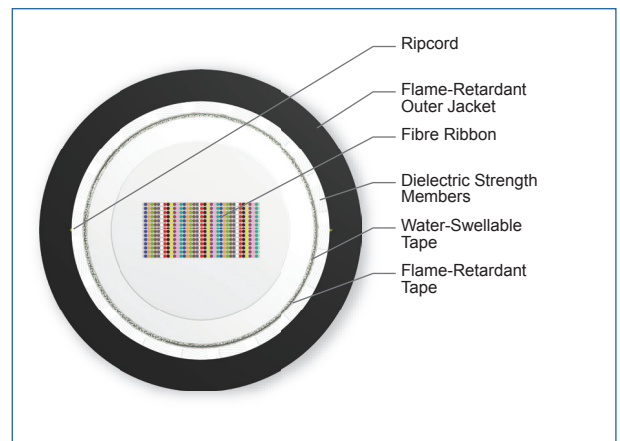
Maximizes use of critical duct space

### Common installations

Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770



Part Number: 504TVF-14190-20



Cross Section of Order Number: 504TVF-14190-20

## Standards

<b>Listings</b>	National Electrical Code® (NEC®) OFNR
<b>Design Criteria</b>	CSA OFN FT-4
<b>Test Criteria</b>	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)
Fibre Category	50 µm MM (OM4)

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

Cable design	
Fibre Count	504
Ribbons per tube	14
Fibres per Ribbon	36
Fibre colouring	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Buffer tube colour	Natural
Buffer tube diameter	17.9 mm (0.7 in)
Tensile Strength Elements and/or Armouring - Layer 1	Dielectric strength members
Tape	Water-swellaable
Tape, Layer 2	Flame-retardant tape
Tape, Layer 3	Water-swellaable
Number of ripcords	2
Outer jacket material	Flame-Retardant, UV-Resistant
Outer jacket colour	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)

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## Mechanical Characteristics Cable

Min. Bend Radius Installation	381 mm (15 in)
Min. Bend Radius Operation	254 mm (10 in)
Weight	564 kg/km (378 lb/1000 ft)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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## Ordering Information

Part Number	504TVF-14190-20
Product Description	FREEDM® UltraRibbon™ Gel-Filled Cable, Riser, 504 fibres, 50 µm multimode (OM4)



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