

FREEDM® Ribbon Interlocking Armored, Gel-Filled Cable, Riser

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

CORNING

Corning FREEDM® ribbon interlocking armored, gel-filled riser cables continue the innovative breakthrough in indoor/outdoor cable technology with a new generation of high-fiber-count single tube cables. These cables are designed to maximize the use of critical duct space with excellent installation results. Encased in spirally-wrapped aluminum interlocking armor for ruggedness and superior crush resistance, the cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables. The UV-resistant, flame-retardant jacket allows this cable to be installed outdoors or in indoor general purpose horizontal and riser applications. The cable employs a single buffer tube containing a stack of 12 fiber ribbons within a gel-filled central buffer tube.

Note: This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

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

Flexible interlocking armor

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

Common installations

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

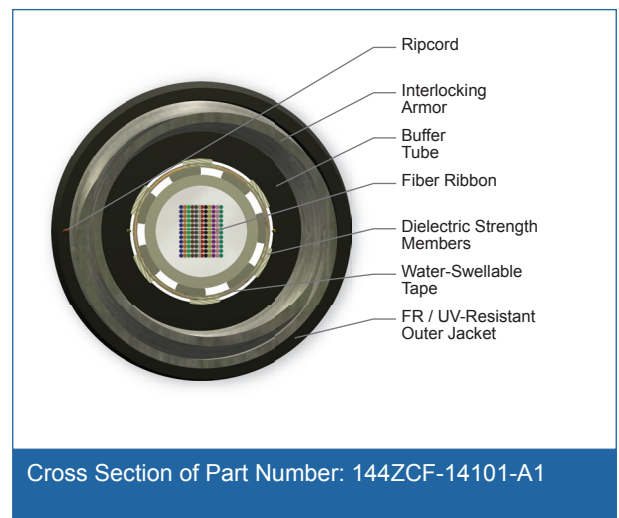
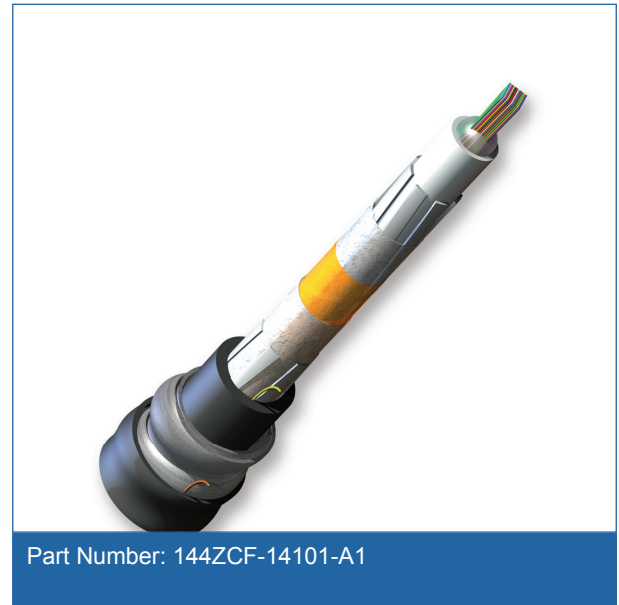
Standards

Listings

National Electrical Code®
(NEC®) OFNR

Design Criteria

CSA OFN FT-4



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Standards

Test Criteria ANSI/ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
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	144
Ribbons per Tube	12
Fibers per Ribbon	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Color	Natural
Buffer Tube Diameter	7.8 mm (0.31 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
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

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Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	600 N (135 lbf)
Weight	365.0 kg/km (244.55 lb/1000 ft)
Nominal Outer Diameter	20.2 mm (0.80 in)
Min. Bend Radius Installation	303.0 mm (12.0 in)
Min. Bend Radius Operation	202.0 mm (8.0 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fiber Specifications

Optical Characteristics (cabled)

Fiber Name	Single-mode (OS2)
Fiber Category	G.652.D/G.657.A1
Fiber Code	H
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

Ordering Information

Part Number	144ZCF-14101-A1
Product Description	FREEDM® Ribbon Interlocking Armored, Gel-Filled Cable, Riser, 144 F, SMF-28® Ultra fiber, Single-mode (OS2)



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