

FREEDM® One Unitized, Tight-Buffered Cable, Riser

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

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Corning FREEDM® One unitized riser cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial and duct applications with no need for a transition splice when entering the building. Available in fiber counts up to 144 fibers, the tight-buffered construction facilitates easy termination for high-fiber-count applications in the local area network (LAN) and eliminates the need for fan-out kits. The design features TIA-598 color-coded 900 µm buffered fibers for easy identification, consistent stripping and direct termination.

Available in 50 µm, 62.5 µm, single-mode and hybrid versions, the cable design meets ICEA S-104-696 test criteria and is also OFNR and FT-4 listed for riser and general purpose use. The small diameter and bend radius of the cable allow for easy installation in space-constrained areas while the innovative waterblocking technology is ideal for OSP applications. The all-dielectric cable construction requires no grounding or bonding, and the UV-resistant, flame-retardant jacket is rugged, durable and easy to strip. This cable is also available with interlocking armor for special applications requiring additional mechanical durability.

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

Waterblocking technology

OSP (outdoor) applications

Small diameter and bend radius

Easy installation in space-constrained areas

Color-coded fibers

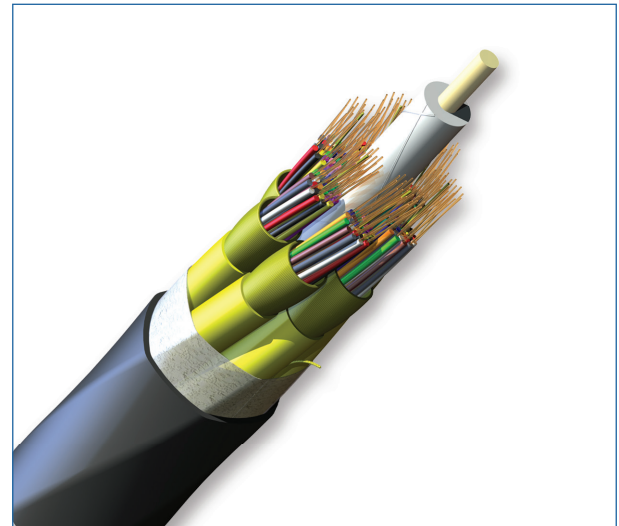
Quick and easy identification

All-dielectric construction

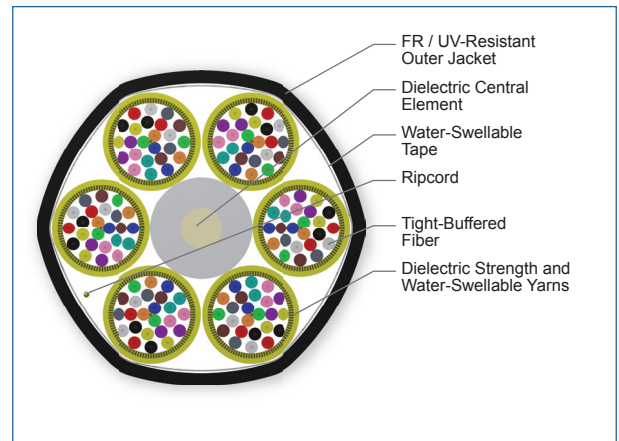
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



Part Number: 144Z8F-Y3131-29



Cross Section of Part Number: 144Z8F-Y3131-29

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Standards

Listings National Electrical Code[®]
(NEC[®]) OFNR, FT-4

Design and Test Criteria ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Direct Buried, Duct, General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
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	
Central Element	Dielectric
Fiber Count	144
Tight Buffer Color	Blue, Orange, Green
Tight buffer color, layer 1	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tight Buffer Color, Layer 2	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Number of Active Tubes	6
Subunit Color	Yellow
Number of Fibers per Subunit	24
Subunit Diameter	7.00 mm (0.27 in)
Tape	Water-swellable
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	810 N (180 lbf)
Weight	433.6 kg/km (291.38 lb/1000 ft)
Nominal Outer Diameter	23.5 mm (0.93 in)
Min. Bend Radius Installation	352.5 mm (14.3 in)
Min. Bend Radius Operation	235 mm (9.3 in)

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.652.D/G.657.A1
Fiber Code	Z
Performance Option Code	31
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.65 dB/km / 0.65 dB/km / 0.5 dB/km

Ordering Information

Part Number	144Z8F-Y3131-29
Product Description	FREEDM [®] One Unitized Tight-Buffered Cable, Riser, 144 F, SMF-28 [®] Ultra fiber, Single-mode (OS2)



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