

FREEDM® One Unitized Tight-Buffered Cable, Riser

48 F, Single-mode (OS2)

CORNING

Corning Cable Systems FREEDM® One Unitized Riser Cables are flame-retardant, UV-resistant, indoor/outdoor cables designed for aerial, duct and direct-buried applications with no need for a transition splice when entering the building. Available in fiber counts of 36, 48 and 72 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 TBII® 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.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, 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 standard 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

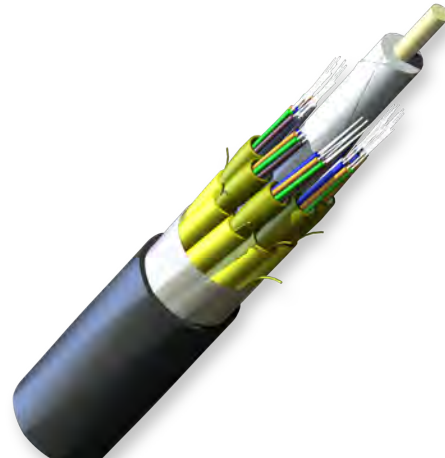
Quick and easy identification

All-dielectric construction

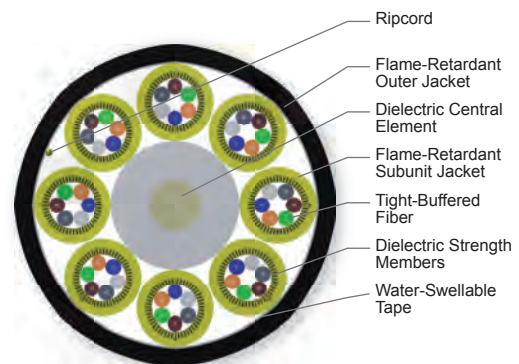
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



Part Number: 048E8F-61131-29



Cross Section of Part Number: 048E8F-61131-29

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Standards

Approval and 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	Single-mode (OS2)

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	48
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White
Fibers per Tube	6
Number of Tube Positions	8
Number of Active Tubes	8
Subunit Color	Yellow
Tape	Water-swellaable
Number of Ripcords	2
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

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Mechanical Characteristics Cable

Weight	279 kg/km (187 lb/1000 ft)
Nominal Outer Diameter	18.6 mm (0.73 in)
Min. Bend Radius Installation	27.9 mm (10 in)
Min. Bend Radius Operation	18.6 mm (7.3 in)
Max. Tensile Strengths, Short-Term	2670 N (600 lbf)
Max. Tensile Strengths, Long-Term	800 N (180 lbf)

Chemical Characteristics

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

Optical Characteristics (cabled)

Fiber Type	Single-mode
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
Fiber Code	E
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
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m

* ITU-T G.652 D compliant.

Notes: 1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) Contact a Corning Cable Systems Customer Care Representative for additional information.

Ordering Information

Part Number	048E8F-61131-29
Product Description	FREEDM® One Unitized Tight-Buffered Cable, Riser, 48 F, Single-mode (OS2)

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The Corning logo consists of a solid blue square with the word "CORNING" in white, uppercase, sans-serif font centered within it.

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Notes



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