

FREEDM® One Tight-Buffered Cable, Riser 12 F, 50 µm multimode, extended 10G distance (OM4)

CORNING

Part Number:
012T8F-31191-29

Corning FREEDM® One 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. The tight-buffered construction facilitates easier termination for low-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. 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 outside plant (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. 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

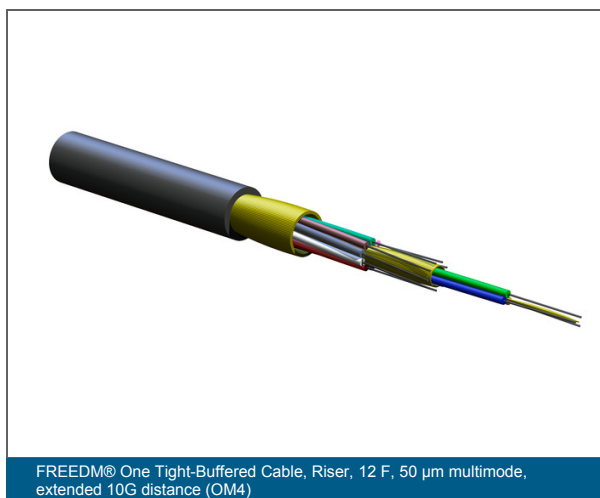
Quick and easy identification

All-dielectric construction

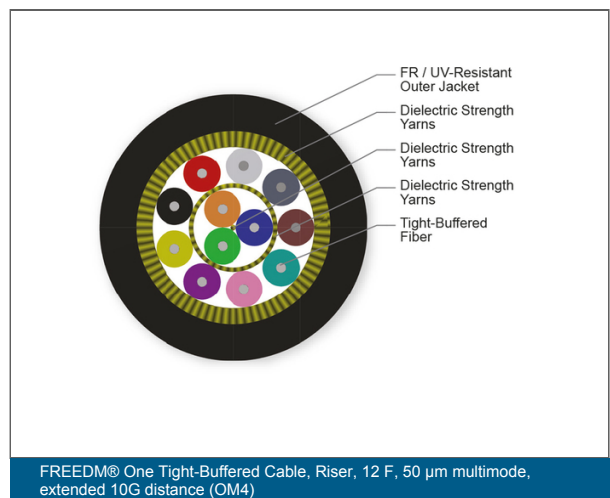
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



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Specifications

General Specifications

Installation Methods	Aerial, Duct, Horizontal, Riser
Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	50 µm MM (OM4+)
Flame Rating	Riser (OFNR)
Cable geometry	Round

Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Approvals and Listings	National Electrical Code® (NEC®) OFNR, UL-1666, CSA OFN FT-4
Design and Test Criteria	ICEA S-104-696

Environmental Conditions

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

Cable Design

Central Element	Dielectric
Fiber Count	12
Outer Jacket Color	Black
Outer Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 1	Water-swellable strength members
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua

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Cable Design

Flame Rating	Riser (OFNR)
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Mechanical Specifications

Max. Tensile Strength, Long-Term	200 N (44.96 lbf)
Max. Tensile Strength, Short-Term	675 N (151.75 lbf)
Min. Bend Radius Installation	97.5 mm (3.84 in)
Min. Bend Radius Operation	65 mm (2.56 in)
Nominal Outer Diameter	6.5 mm (0.26 in)

Optical Characteristics

Fiber Code	T
Performance Option Code	91
Fiber Category	OM4 Extended Distance
Fiber Type	Multimode
Fiber Name	50 µm MM (OM4+)
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Wavelengths	850 nm / 1300 nm
Fiber Compliance	IEC 60793-2-10
Fiber Core Diameter	50 µm
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	600 m / -
Minimum Effective Modal Bandwidth (EMB)	5350 MHz*km / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km

Dimensions

Cable Weight	35.9 kg/km (24.12 lb/1000 ft)
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The Corning logo is a solid blue square with the word "CORNING" in white, uppercase, sans-serif font centered within it.

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Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

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