

FREEDM® One Tight-Buffered Cable, Riser 12 F, 62.5 µm multimode (OM1)

CORNING

Part Number:
012K8F-31130-29

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

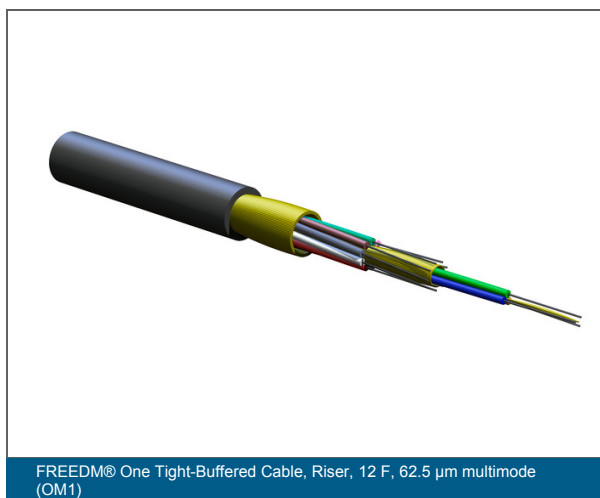
Quick and easy identification

All-dielectric construction

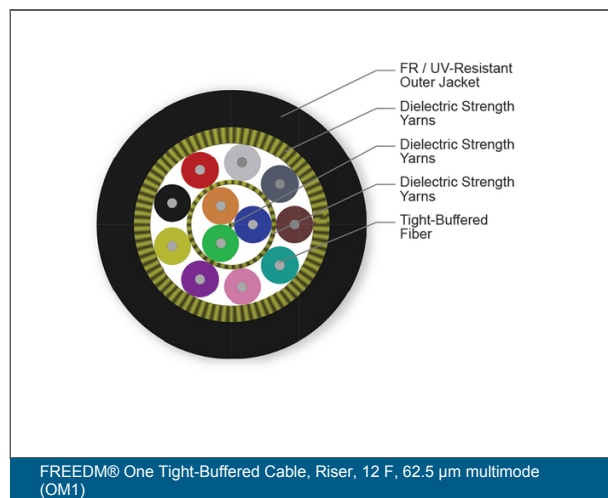
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip



FREEDM® One Tight-Buffered Cable, Riser, 12 F, 62.5 µm multimode (OM1)



FREEDM® One Tight-Buffered Cable, Riser, 12 F, 62.5 µm multimode (OM1)

FREEDM® One Tight-Buffered Cable, Riser 12 F, 62.5 µm multimode (OM1)

CORNING

Specifications

General Specifications

Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Dielectric
Fiber Category	62.5 µm MM (OM1)
Flame Rating	Riser (OFNR)
Application	Aerial, Duct, General purpose, Horizontal, Vertical Riser
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

FREEDM® One Tight-Buffered Cable, Riser 12 F, 62.5 µm multimode (OM1)

CORNING

Cable Design

Flame Rating	Riser (OFNR)
--------------	--------------

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	K
Fiber Name	62.5 µm MM (OM1)
Fiber Type	Multimode
Performance Option Code	30
Fiber Core Diameter	62.5 µm
Minimum Effective Modal Bandwidth (EMB)	220 MHz
Maximum Attenuation	3.4 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	200 MHz / 500 MHz
Serial 1 Gigabit Ethernet	300 m / 550 m
Serial 10 Gigabit Ethernet	33 m / -
Wavelengths	850 nm / 1300 nm
Fiber Category	OM1

Dimensions

Cable Weight	36.55 kg/km (24.56 lb/1000 ft)
Length	0 mm (0 in)

FREEDM® One Tight-Buffered Cable, Riser 12 F, 62.5 µm multimode (OM1)

The Corning logo consists of a solid blue square. Inside the square, the word "CORNING" is written in a white, serif, all-caps font, centered horizontally and vertically.

CORNING



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

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2025 Corning Optical Communications. All rights reserved.