

FREEDM® Mini Cable

CORNING

FREEDM Mini Plenum and Riser indoor/outdoor fiber optic cables are designed to deliver reliable performance, simplified installation, and long-term durability. These indoor/outdoor cables are designed for duct applications with no need for a transition splice when entering the building. Featuring a 4.8mm OD, this cable is optimized for space-constrained pathways. The durable plenum rated jacket enables compliance with ICEA 696, while the smaller cable OD, tensile strength, and enhanced crush resistance helps ensure faster, cleaner installations. FREEDM Mini is an ideal solution for indoor-outdoor installations, offering a balance of performance, protection, and installation efficiency to meet today's evolving network demands.

Features and Benefits

Waterblocking technology

OSP (outdoor) applications

Small diameter and bend radius

Easy installation in space-constrained areas

Color-coded 250 µm fibers

Quick and easy identification

All-dielectric construction

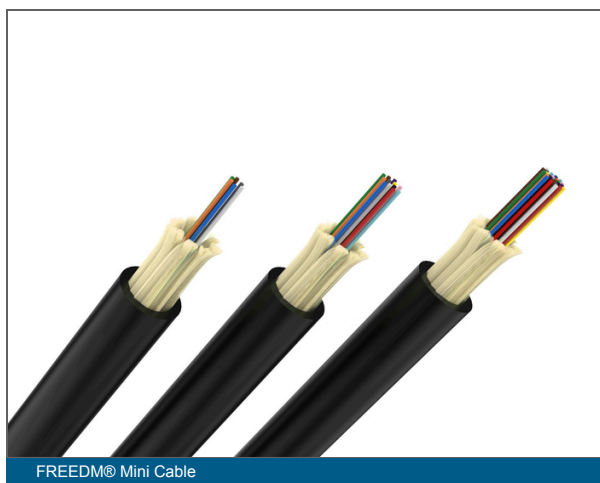
Requires no grounding or bonding

UV-resistant, flame-retardant jacket

Rugged, durable and easy to strip

Lightweight

Increased sustainability



Specifications

General Specifications

Environment	Indoor/Outdoor
Product Type	Dielectric
Cable Type	Loose Tube

Temperature Range

Temperature Range, Storage	-40 °C - 70 °C (-40 °F - 158 °F)
Temperature Range, Installation	0 °C - 60 °C (32 °F - 140 °F)
Temperature Range, Operation	-40 °C - 70 °C (-40 °F - 158 °F)

Design Characteristics Cable

Fiber Count
6 - 24

Mechanical Characteristics Cable

Fiber Count	Product Type	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Crush Resistance	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Cable Weight
6	Dielectric	4.8 mm	96 mm (3.78 in)	48 mm (1.89 in)	220 N/cm	1335 N (300.12 lbf)	675 N (151.75 lbf)	19.7 kg/km (13.24 lb/1000 ft)
12	Dielectric	4.8 mm	96 mm (3.78 in)	48 mm (1.89 in)	220 N/cm	1335 N (300.12 lbf)	675 N (151.75 lbf)	20.5 kg/km (13.78 lb/1000 ft)
24	Dielectric	4.8 mm	96 mm (3.78 in)	48 mm (1.89 in)	220 N/cm	1335 N (300.12 lbf)	675 N (151.75 lbf)	22.1 kg/km (14.85 lb/1000 ft)



Transmission Performance

Multimode	
Fiber Category	OM4
Fiber Code	T
Performance Option Code	90
Fiber Core Diameter	50 µm
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

Transmission Performance

Single-mode	
Fiber Name	Bend-Improved Single-mode (OS2)
Performance Option Code	01
Fiber Category	OS2
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Code	Z
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km

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D - **3** **1** **3** **D** **2** **7**

1 **2** **3** **4** **5** **6** **7** **8** **9**

- 1** Select fiber count.
006 012 024 (SM only)
- 2** Select fiber code.
T = 50 µm multimode (OM4)
Z = Single-mode (OS2)
SMF-28® Ultra fiber
- 3** Defines cable type.
D = FREEDM Indoor/Outdoor

- 4** Select outer jacket.
F = Indoor/outdoor riser
P = Indoor/outdoor plenum
- 5** Defines fiber placement.
3 = Loose fiber
- 6** Defines length markings.
1 = Markings in ft (standard)
- 7** Defines tensile strength.
3 = See specifications

- 8** Select performance option code.
90 = 50 µm multimode (OM4)
01 = Single-mode (OS2)
(Max. attenuation 0.4/0.4/0.3 dB/km)
- 9** Defines cable type.
D27 = FREEDM Mini



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