FREEDM® One Tight-Buffered, Interlocking Armored Cable, Plenum 12 F, 50 µm multimode (OM4)

Part Number:
012T8P-31190-A3

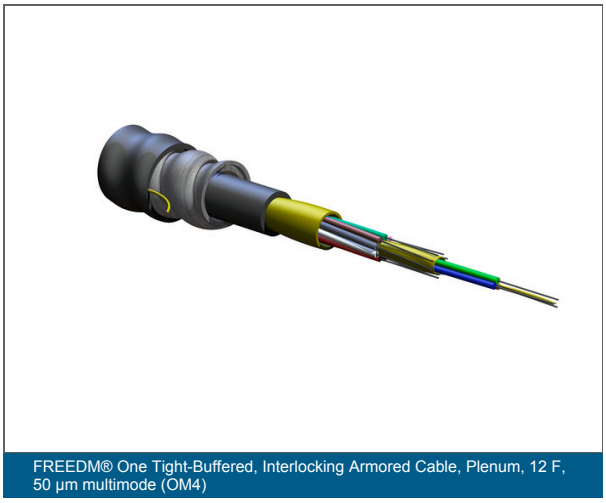
Corning FREEDM® One interlocking armored cables are flame-retardant, indoor/outdoor cables designed for interbuilding and intrabuilding backbone installations that eliminate the need for a transition splice when entering the building. Encased in a spirally wrapped, aluminum interlocking armor for ruggedness and superior crush resistance, these cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables. These cables are protected against water penetration by innovative waterblocking technology, making them ideal for OSP applications. The flexible, interlocking armored design offers up to seven times the crush protection compared to unarmored cables (as characterized to ICEA-696) and allows easy one-step installation, thereby reducing overall installation costs. 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

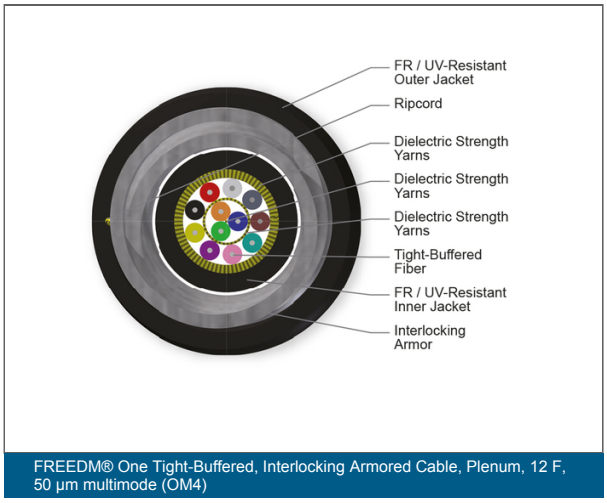
Waterblocking technology
OSP (outdoor) applications

Flexible, interlocking armor design
Seven times crush protection compared to non-armored cables

UV-resistant, flame-retardant jacket
Rugged, durable and easy to strip



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CORNING

Specifications

General Specifications	
Cable Type	Tight-Buffered
Environment	Indoor/Outdoor
Product Type	Interlocking Armor
Fiber Category	50 µm MM (OM4)
Flame Rating	Plenum (OFCP)
Application	Aerial, Direct Buried, Duct, General purpose, Horizontal, Vertical Riser, Plenum
Cable geometry	Round

Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Approvals and Listings	National Electrical Code® (NEC®) OFCP, CSA FT-6
Design and Test Criteria	ICEA S-104-696

Environmental Conditions	
Temperature Range, Installation	0 °C to 60 °C (32 °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
Number of Ripcords	2
Outer Jacket Color	Black
Outer Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 1	Water-swellable strength members

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CORNING

Cable Design	
Tensile Strength Elements and/or Armoring - Layer 2	Interlocking Armor
Inner Jacket Material	Flame-Retardant, UV-Resistant
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Flame Rating	Plenum (OFCP)

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	177 mm (6.97 in)
Min. Bend Radius Operation	118 mm (4.65 in)
Nominal Inner Cable Diameter	6.3 mm (0.25 in)
Nominal Outer Diameter	11.8 mm (0.46 in)

Optical Characteristics	
Fiber Code	T
Fiber Type	Multimode
Performance Option Code	90
Fiber Core Diameter	50 µm
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Serial 1 Gigabit Ethernet	1000 MHz*km / 600 MHz*km
Serial 10 Gigabit Ethernet	550 MHz*km / -
Wavelengths	850 nm / 1300 nm
Fiber Category	OM4

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Dimensions	
Cable Weight	124.6 kg/km (83.73 lb/1000 ft)
Length	0 mm (0 in)

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