FREEDM® One Unitized, Interlocking Armored, Tight-Buffered Cable, Riser

48 F, 50 µm multimode (OM4)



Corning FREEDM® One unitized interlocking armored riser cables are standard FREEDM one unitized riser cables inside a spirally wrapped aluminum interlocking armor for ruggedness and superior crush resistance. These cables meet the application requirements of the National Electrical Code® (NEC® Article 770) and are OFCR and FT-4 listed, as well as meeting ICEA S-104-696 test criteria. Available in 62.5 μm , standard 50 μm , laser-optimized 50 μm , single-mode and hybrid versions, the armored design allows easy, one-step installation of cable, with no inner duct required, reducing overall installation costs. The product is available with Gigabit and 10 Gigabit Ethernet performance.

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

Flexible interlocking armor

More than seven times the crush protection compared to non-armored cables

Eliminates cable transition at building entrance Reduces installation time and cost

Tight-buffered design

Eliminates need for fan-out kits

Standards

Approval and Listings

National Electrical Code[®] (NEC[®]) OFCR, CSA FT-4, ICEA S-104-696



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Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Tight-Buffered
Product Type	Interlocking armor
Flame Rating	Riser (OFCR)
Fiber Category	50 μm MM (OM4)

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, Red, Black, Yellow, Violet, Rose, Aqua
Number of Ripcords	2
Subunit Color	Orange
Number of Subunits	8
Subunit Diameter	4.4 mm (0.17 in)
Subunit Jacket Material	Flame-retardant
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tensile Strength Elements and/or Armoring - Layer 2	Interlocking armor
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Weight	557 kg/km (373 lb/1000 ft)
Nominal Outer Diameter	27.0 mm (1.06 in)
Min. Bend Radius Installation	405 mm (15.9 in)
Min. Bend Radius Operation	270 mm (11 in)



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Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2670 N (600 lbf)
Max. Tensile Strength, Long-Term	801 N (180 lbf)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM4
Fiber Code	Т
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 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 / -

Ordering Information

Part Number	048T8F-61190-A1
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