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

48 F, Single-mode (OS2)

CORNING

Corning Cable Systems 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 cost. The product is available with Gigabit and 10 Gigabit Ethernet performance.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, 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 standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Part Number: 048E8F-61131-A1

Features and Benefits

Flexible interlocking armor
More than seven times the crush protection compared to unarmored cables

Eliminates cable transition at building entrance
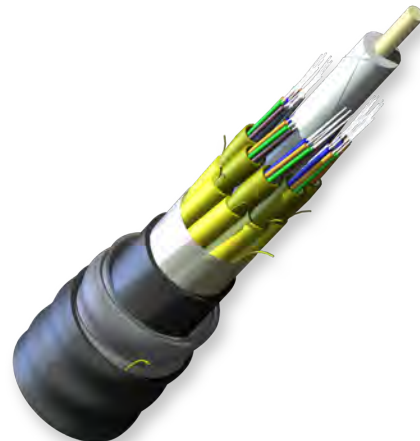Reduces installation time and cost

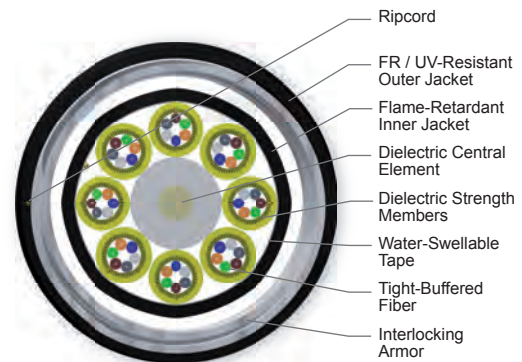**Tight-buffered design**
Eliminates needs for fan-out kits

Standards

Approval and Listings	National Electrical Code® (NEC®) OFCR, CSA FT-4, ICEA S-104-696

- Ripcord
- FR / UV-Resistant Outer Jacket
- Flame-Retardant Inner Jacket
- Dielectric Central Element
- Dielectric Strength Members
- Water-Swellable Tape
- Tight-Buffered Fiber
- Interlocking Armor

Cross Section of Part Number: 048E8F-61131-A1

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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	Single-mode (OS2)

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	Yellow
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 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 Strengths, Short-Term	2670 N (600 lbf)
Max. Tensile Strengths, 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 Type	Single-mode
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
Fiber Code	E
Performance Option Code	31
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.65 dB/km / 0.65 dB/km / 0.5 dB/km
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m

* ITU-T G.652 D compliant.

Notes: 1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) *Contact a Corning Cable Systems Customer Care Representative for additional information.*

Ordering Information

Part Number	048E8F-61131-A1
Product Description	FREEDM® One Unitized, Interlocking Armored, Tight-Buffered Cable, Riser, 48 F, Single-mode (OS2)

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Notes

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