FREEDM® LST™ Loose Tube, Gel-Free, Interlocking Armored Cable, Riser

24 F, Single-mode (OS2)

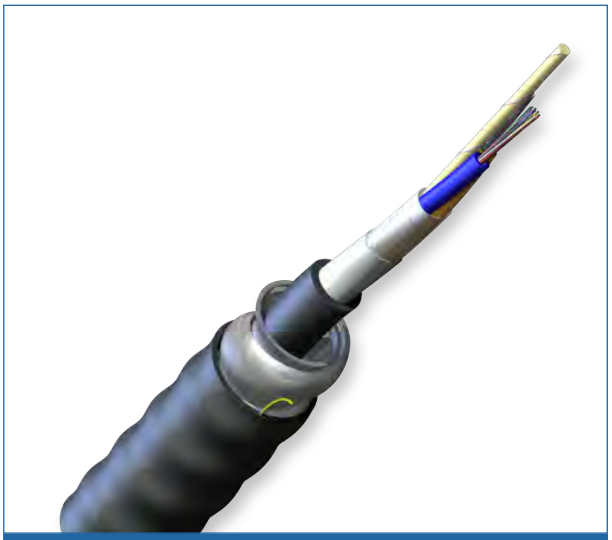
CORNING

Corning FREEDM® LST™ gel-free interlocking armored cables are flame-retardant, indoor/outdoor, riser-rated cables designed for interbuilding and intrabuilding backbones in aerial, duct and riser applications. 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 and for high-fiber-count trunking applications in areas with limited conduit or vault space. The riser rating precludes the need for a transition splice when entering the building.

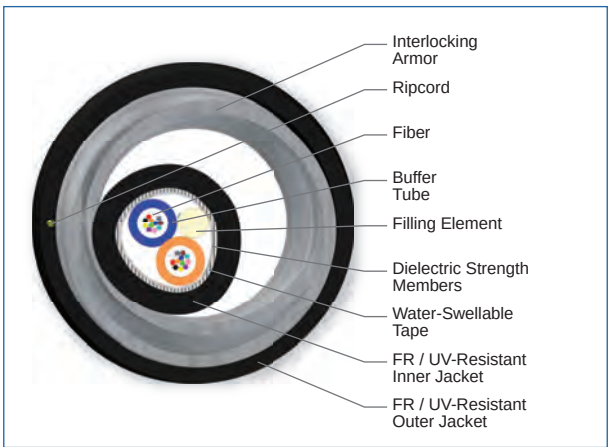
These cables are protected against water penetration by innovative waterblocking tapes and yarns that swell to absorb water without the use of messy gels to provide more efficient and craft-friendly cable preparation. This waterblocking technology makes cable access easier and simplifies the use of buffer tube fan-out kits. The buffer tubes and fibers in each tube are color coded for quick, easy identification. The SZ-stranded, loose tube design isolates fibers from installation, environmental rigors and allows for easy mid-span access.

The cable design is also National Electrical Code® (NEC®) listed (OFCR and FT-4) and meets NEC Article 770. The flexible, interlocking armored design offers over seven times the crush protection compared to unarmored cables (as characterized to ICEA-696) and allows easy one-step installation, thereby reducing the 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.



Part Number: 024ESF-T4101DA1



Cross Section of Part Number: 024ESF-T4101DA1

Features and Benefits

Flexible, interlocking armor design
Seven times crush protection compared to unarmored cables

Gel-free waterblocking technology
Craft-friendly cable preparation

Color-coded tubes and fibers
Quick and easy identification

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

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Standards

Approval and Listings	National Electrical Code® (NEC®) OFCR, CSA OFC FT-4
Common Installations	Outdoor aerial and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770
Design and Test Criteria	ANSI/ICEA S-104-696

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal, (Vertical Riser)
Cable Type	Loose Tube
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	24
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12, 12
Number of Active Tubes	2
Number of Tube Positions	2
Buffer Tube Color Coding	Blue, Orange
Tape	Water-swellable

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Cable Design	
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	1
Inner Jacket Material	Flame-Retardant, UV-Resistant
Tensile Strength Elements and/or Armoring - Layer 2	Interlocking armor
Outer Jacket Material	Flame-Retardant, UV-Resistant
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Nominal Core Diameter	11.2 mm (0.44 in)
Nominal Outer Diameter	18.8 mm (0.74 in)
Min. Bend Radius Installation	282 mm (11.1 in)
Min. Bend Radius Operation	188 mm (7.4 in)
Weight	259 kg/km (174 lb/1000 ft)

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

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Name	SMF-28e+® fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	01
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Typical attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

** Typical attenuation values match the attenuation values listed in the optical fiber specifications. See **www.corning.com/opticalfiber** for Corning optical fiber specifications. Better attenuation performance options are available for some fiber and cable types. Contact Customer Care for additional fiber options.*
** * SMF-28® Ultra and ClearCurve® XB fiber deliver up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.*

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Ordering Information

Part Number	024ESF-T4101DA1
Product Description	FREEDM® LST™ Loose Tube, Gel-Free, Interlocking Armored Cable, Riser, 24 F, Single-mode (OS2)

RoHS COMPLIANT

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