

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

12 F, 50 µm multimode (OM2)

CORNING

Corning Cable Systems 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 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.

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.

Features and Benefits

Flexible, interlocking armor design

Seven times crush protection compared to unarmored cables

Gel-free waterblocking technology

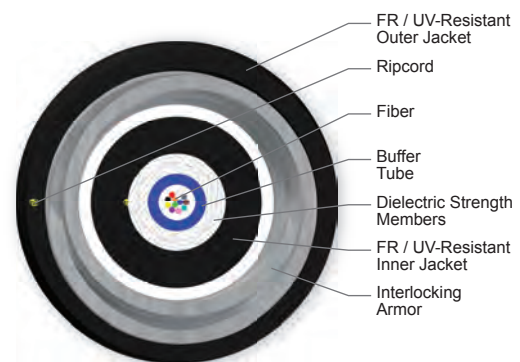
Craft-friendly cable preparation

Color-coded tubes and fibers

Quick and easy identification



Part Number: 012TSF-T4131DA1



Cross Section of Part Number: 012TSF-T4131DA1

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Features and Benefits

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

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	50 µm MM (OM2)

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

Fiber Count	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12

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Cable Design

Number of Tube Positions	1
Number of Active Tubes	1
Tensile Strength Elements and/or Armoring - Layer 1	Water-swellable 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 Strengths, Short-Term	1330 N (300 lbf)
Max. Tensile Strengths, Long-Term	400 N (90 lbf)
Nominal Core Diameter	8.0 mm (0.31 in)
Nominal Outer Diameter	15 mm (0.59 in)
Min. Bend Radius Installation	225 mm (8.9 in)
Min. Bend Radius Operation	150 mm (5.9 in)
Weight	182 kg/km (122 lb/1000 ft)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 µm
Fiber Type	Multimode
Fiber Category	OM2
Fiber Code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -
Serial 1 Gigabit Ethernet	750 m / 600 m
Serial 10 Gigabit Ethernet	150 m / -

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
2) Improved attenuation and bandwidth options available.
3) Bend-insensitive single-mode fibers available on request.
4) Contact a Corning Cable Systems Customer Care Representative for additional information.

Ordering Information

Part Number	012TSF-T4131DA1
Product Description	FREEDM® LST™ Single-Tube, Gel-Free, Interlocking Armored Cable, Riser, 12 F, 50 µm multimode (OM2)



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