

FREEDM® One Riser Cables

A LANscape® Pretium™ Solutions Product

Description

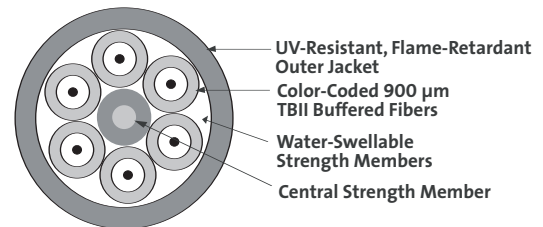
Corning Cable Systems FREEDM® One Riser Cables are OFNR/FT-4 listed, UV-resistant and fully waterblocked for indoor/outdoor applications. They are suitable for duct, aerial and direct-buried installations with no need for a transition splice when entering the building. Available in fiber counts of six, 12, 18 and 24 fibers, the tight-buffered construction facilitates easier termination for low-fiber-count applications in the local area network (LAN).

Features / Benefits

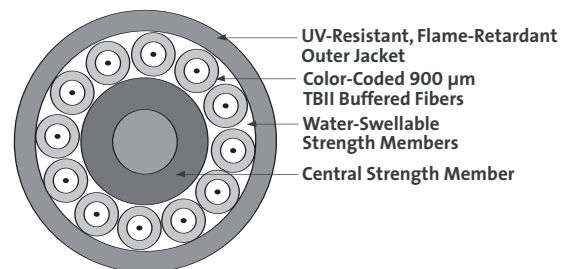
- Eliminates cable transition at the building entrance, thereby reducing installation time and cost in addition to increasing channel operation margin
- Tight-buffered design eliminates need for fan-out kits
- TIA-598 color-coded 900 µm TBII® Buffered Fibers for easy identification, consistent stripping and direct termination
- Small diameter and bend radius allow for easy installation in space-constrained areas
- All-dielectric cable construction eliminates grounding and bonding concerns
- UV-resistant, flame-retardant outer jacket is rugged and durable
- Innovative waterblocking technology for OSP applications
- OFNR and FT-4 listed for riser and general purpose use
- Available with 50 µm, 62.5 µm, single-mode fiber and hybrid versions
- ICEA S-104-696 test criteria
- Also available in OFNP and FT-6 listed cables.
- Available with interlocking armor applications requiring additional mechanical durability



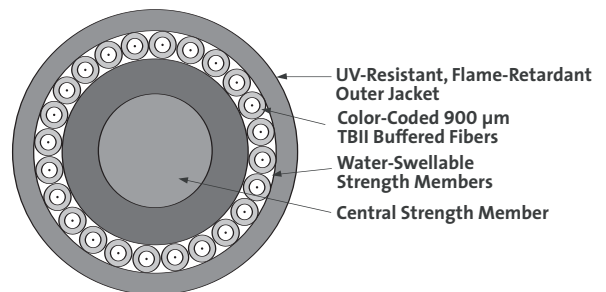
FREEDM One Riser Cable | Photo LAN380



FREEDM One Riser Cable, 6-Fiber | Drawing ZA-2630



FREEDM One Riser Cable, 12-Fiber | Drawing ZA-2630



FREEDM One Riser Cable, 24-Fiber | Drawing ZA-2630



Product Specifications

FREEDM® One Riser Cables

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Specifications

| | |
|---------------------------------|---|
| Temperatures | Storage: -40° to +70°C (-40° to +158°F) Installation: 10° to +60°C (+14° to +140°F) Operation: -40° to +70°C (-40° to +158°F) |
| Approvals and Listings | National Electrical Code® (NEC®) OFNR, FT-4 |
| Design and Test Criteria | ICEA S-104-696 |

| Fiber Count | Nominal Weight kg/km (lb/1000 ft) | Nominal Outer Diameter mm (in) | Minimum Bend Radius | | Maximum Tensile Loads | |
|-------------|-----------------------------------|--------------------------------|---------------------|-------------------|-----------------------|-------------------|
| | | | Loaded cm (in) | Installed cm (in) | Short-Term N (lbf) | Long-Term N (lbf) |
| 6 | 38 (26) | 6.4 (0.25) | 9.6 (3.8) | 6.4 (2.5) | 1335 (300) | 400 (90) |
| 12 | 58 (39) | 7.6 (0.30) | 11.1 (4.5) | 7.6 (3.0) | 1335 (300) | 400 (90) |
| 18 | 92 (62) | 9.7 (0.38) | 14.6 (5.7) | 9.7 (3.8) | 2670 (600) | 801 (180) |
| 24 | 124 (83) | 11.0 (0.43) | 22.0 (8.6) | 11.0 (4.3) | 2670 (600) | 801 (180) |

Transmission Performance

| Fiber Code | C | S | S | K | E |
|--|-------------------------|-------------------------|-------------------------|---------------------------|----------------------------|
| Performance Option Code | 31 | 80 | 90 | 30 | 31 |
| Fiber Type | 50/125 μm (850/1300 nm) | 50/125 μm (850/1300 nm) | 50/125 μm (850/1300 nm) | 62.5/125 μm (850/1300 nm) | Single-mode (1310/1550 nm) |
| Maximum Attenuation (dB/km) | 3.5/1.5 | 3.0/1.5 | 3.0/1.5 | 3.5/1.0 | 0.65/0.50 |
| Minimum LED Bandwidth (MHz•km) | 500/500 | 1500/500 | 1500/500 | 200/500 | - / - |
| Minimum Effective Modal Bandwidth (MHz•km) | *510/ - | **2000/ - | ***4700/ - | *220/ - | - / - |
| Serial Gigabit Ethernet Distance (m) | 600/600 | 1000/600 | 1000/600 | 300/550 | 5000/ - |
| Serial 10 Gigabit Ethernet Distance (m) | 82/ - | 300/ - | ***550/ - | 33/ - | 10000/40000 |

* As predicted by RML BW, per TIA/EIA 455-204 and IEC 60793-1-41, for intermediate-performance, laser-based systems (up to 1 Gb/s).

** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high-performance, laser-based systems (up to 10 Gb/s).

*** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high-performance, laser-based systems (up to 10 Gb/s).

**** The 550 m distance is equivalent to a 4700 EMB system with standards-compliant transceiver and fiber characteristics, 3.0 dB/km cable attenuation and 1.0 dB total connector loss.

Ordering Information

Contact Customer Service for other options.

□ □ □ □ 8 F - 3 1 1 □ □ - 2 9

1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - 3 Select fiber count (006, 012, 018 OR 024).

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.

8/- = FREEDM® One Cable

6 Defines outer jacket.

F = Indoor/outdoor riser

7 Defines fiber placement.

3 = Standard for FREEDM One Riser Cable

8 Defines length markings.

1 = Markings in feet (standard) for single-layer design

9 Defines tensile strength (see Specifications).

10 - 11 Select performance option code. (see Transmission Performance Table).

13 - 14 Defines special requirements.

29 = No special requirements

CORNING

LANscape®
Pretium™ Solutions

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