

FREEDM® One Interlocking Armored Riser Cables

A LANscape®
Solutions Product

features and benefits |

Waterblocking technology	Indoor/outdoor applications
Flexible, interlocking armor design	Seven times crush protection compared to unarmored cables
UV-resistant, flame-retardant jacket	Durable and easy to strip

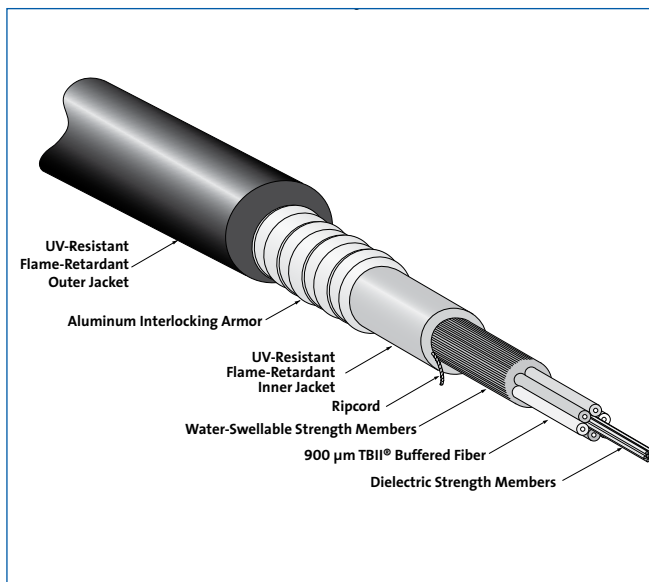
Corning Cable Systems FREEDM® One Interlocking Armored Riser Cables are flame-retardant, indoor/outdoor, riser cables designed for intrabuilding backbones and installations in riser and general-purpose environments. Encased in a spirally wrapped, aluminum interlocking armor for ruggedness and superior crush resistance, these cables are ideal for industrial and heavy traffic areas and installations requiring extra protection for optical cables.

Available in a compact design with fiber counts of six, 12, 18 and 24 fibers, these cables are protected against water penetration by innovative waterblocking technology, making it ideal for OSP applications. Available in 50 µm, 62.5 µm, single-mode and hybrid versions, the cable design meets the application requirements of NEC® (National Electrical Code®) Article 770 and is OFCR and FT-4 listed. The flexible, interlocking armored design offers over seven times

(continued)



FREEDM One Interlocking Armored Riser Cable
| Photo LAN693



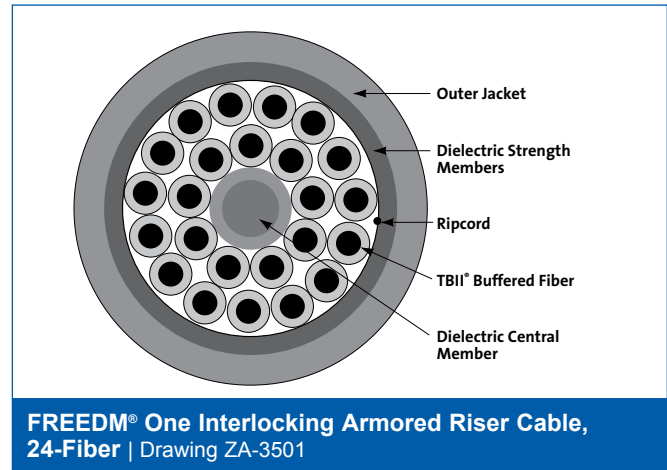
FREEDM One Interlocking Armored Riser Cable, 6-Fiber | Drawing ZA-2818



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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 with Gigabit Ethernet and 10 Gigabit Ethernet performance.



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®) OFCR, CSA FT-4, ICEA S-104-696

Flame Resistance

UL-1666 (for riser and general building applications)

Corning Cable Systems recommends storing indoor/outdoor cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Fiber Count	Nominal Cable Weight kg/km (lb/1000 ft)	Nominal Outside Diameter mm (in)	Minimum Bend Radius	
			Loaded cm (in)	Installed cm (in)
2	107 (72)	11.5 (0.45)	17.3 (6.8)	11.5 (4.5)
4	111 (74)	11.5 (0.45)	17.3 (6.8)	11.5 (4.5)
6	113 (76)	11.5 (0.45)	17.3 (6.8)	11.5 (4.5)
12	132 (89)	12.5 (0.49)	18.8 (7.4)	12.5 (4.9)
18	154 (103)	13.3 (0.52)	20.0 (7.9)	13.3 (5.2)
24	175 (117)	14.6 (0.57)	21.9 (8.6)	14.6 (5.7)

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transmission performance |

	LANscape® 62.5 Solutions	LANscape Pretium® 150 Solutions	LANscape Pretium 300 Solutions	LANscape Pretium 550 Solutions	LANscape Pretium 600 Solutions	Single-Mode	Bend-Improved Single-Mode
Fiber Code	K	T	T	T	T	E	H
Performance Option Code	30	31	80	90	91	31	31
Optical Fiber Type (µm)	62.5 Multimode	50 Multimode	50 Multimode	50 Multimode	50 Multimode	Single-mode*	Bend-Improved Single-mode†
ISO/IEC 11801 Nomenclature	OM1	OM2	OM3‡	OM3‡	OM3‡	OS2	OS2
Wavelength (nm)	850/1300	850/1300	850/1300	850/1300	850/1300	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0	0.65/0.65/0.5	0.65/0.65/0.5
Minimum Over Filled Launch (OFL) Bandwidth (MHz•km)	200/500	700/500	1500/500	1500/500	1500/500	- / - / -	- / - / -
Minimum Effective Modal Bandwidth (EMB) (MHz•km)	220/ -	950/ -	2000/ -	4700/ -	5350/ -	- / - / -	- / - / -
Serial 1 Gigabit Ethernet Distance (m)	300/550	750/600	1000/600	1000/600	1000/600	5000 / - / -	5000 / - / -
Serial 10 Gigabit Ethernet Distance (m)	33/ -	150/ -	300/ -	550§/ -	600**/ -	10000/ - /40000	10000/ - /40000

* ITU 652.D compliant.

† ITU 652.D compliant, ITU 657.A compliant.

‡ Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™ Systems solutions.

§ Assumes 1.0 dB maximum total connector/splice loss.

** Assumes 0.7 dB maximum total connector/splice loss.

Notes:

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

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ordering information | Contact Customer Service at 800-743-2671 for other options.

□	□	□	□	8	F	-	3	1	1	□	□	-	A	1	
1	2	3	4	5	6		7	8	9	10	11		12	13	14

|1-3

Select fiber count.

Standard offerings:

002 004 006
012 018 024

|5 / 12

Defines cable type.

8 / - = Standard for FREEDM®
One Cable

|8

Defines length markings.

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

|10-11

Select performance
option code (see
Transmission
Performance table).

|4

Select fiber code
(see Transmission
Performance table).

|6

Defines outer jacket.

F = Indoor/outdoor riser

|9

Defines tensile strength
(see Specifications).

|13-14

Defines special
requirements.

A1 = Aluminum interlocking
armor with
riser-rated jacket

|7

Defines fiber placement.

3 = Standard for FREEDM
One Riser Cables

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