

FREEDM® One Unitized Interlocking Armored Riser Cables

CORNING

Features and Benefits

Flexible, interlocking armor design

Seven times 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

Flame Resistance

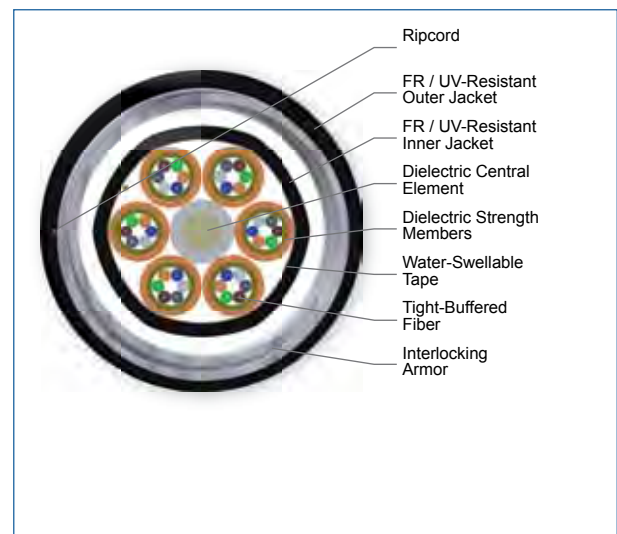
UL-1666 (for riser and general building applications)

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.

FREEDM® One Cables are available in 12 different jacket colors, enabling easy visual identification and segregation of cables while still providing all the required environmental protection of an indoor/outdoor cable jacket.



FREEDM® One Unitized Interlocking Armored Riser Cables, 36-Fibers

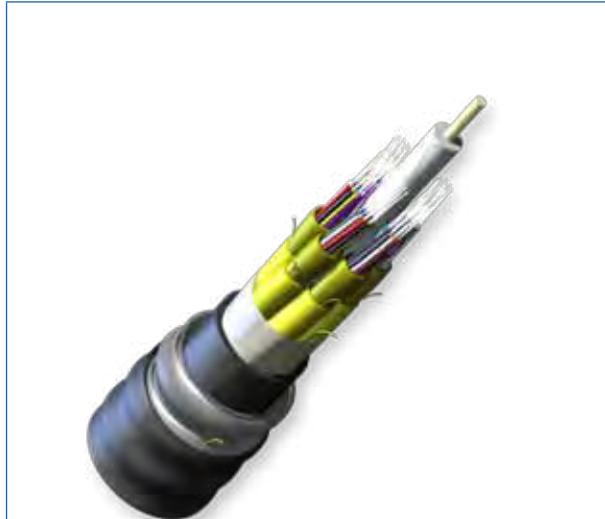


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FREEDM® One Unitized Interlocking Armored Riser Cables, 72-Fibers



FREEDM® One Unitized Interlocking Armored Riser Cables, 72-Fibers

Specifications

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)

* 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.

Mechanical Characteristics Cable					
Fiber Count	Product Type	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
36	Interlocking armor	24.5 mm (0.97 in)	368 mm (17.5 in)	245 mm (12 in)	449 kg/km (301 lb/1000 ft)
48	Interlocking armor	27 mm (1.06 in)	405 mm (17.5 in)	270 mm (12 in)	557 kg/km (373 lb/1000 ft)
72	Interlocking armor	29.6 mm (1.2 in)	444 mm (17.5 in)	296 mm (12 in)	682 kg/km (458 lb/1000 ft)

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Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Transmission Performance

Fiber Type	Multimode	Multimode	Multimode	Multimode	Multimode	Single-mode	Bend-Improved Single-mode (OS2)
Fiber Core Diameter (µm)	62.5	50	50	50	50	8.2	9
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance	OS2	OS2
Fiber Code	K	T	T	T	T	E	H
Performance Option Code	30	31	80	90	91	31	31
Wavelengths (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	2.8 / 1	2.8 / 1	2.8 / 1	2.8 / 1	0.65 / 0.65 / 0.5	0.65 / 0.65 / 0.5
Serial 1 Gigabit Ethernet (m)	300 / 550	750 / 600	1000 / 600	1100 / 600	1100 / 600	5000 / - / -	5000 / - / -
Serial 10 Gigabit Ethernet (m)	33 / -	150 / -	300 / -	550 / -	600 / -	10000 / - / 40000	10000 / - / 40000
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200 / 500	700 / 500	1500 / 500	3500 / 500	3500 / 500		
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220 / -	950 / -	2000 / -	4700 / -	5350 / -		
Induced Attenuation @ 7.5 mm Radius (dB)			< 30 up to 80				

* Assumes 1.0 dB maximum total connector/splice loss.

* Assumes 0.7 dB maximum total connector/splice loss.

* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

* ITU-T G.652 D compliant.

* ITU-T G.652 D and ITU-T G.657 A1 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.

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Ordering Information | Contact Customer Care at 1-800-743-2671 for other options.

				8	F	-			1			-	A	1
1	2	3	4	5	6	7	8	9	10					

1 Select fiber count.

Standard offerings:

036 048 072

2 Select fiber code.

K = 62.5 µm multimode, OM1

C = 50 µm multimode, OM2

S = 50 µm multimode, OM3

E = Single-mode, OS2 SMF-28e®

3 Defines cable type.

8 = FREEDM® One Cable

4 Defines outer jacket.

F = Indoor/outdoor riser

5 Select fiber placement.

6 = 6 fiber subunits for 36 and 48 fibers

T = 12 fiber subunits for 72 fibers

6 Select length markings.

3 = Markings in feet for 72 fibers

1 = Markings in feet (standard) for 36 and 48 fibers

7 Defines tensile strength.

1 = See Specifications.

8 Select performance option code.

30 = 62.5 µm multimode, OM1

31 = 50 µm multimode, OM2

80 = 50 µm multimode, OM3

90 = 50 µm multimode, OM4

91 = 50 µm multimode, OM4

31 = Single-mode, OS2

(Max. attenuation .65 / .65 dB/km)

9 Defines cable type.

- = FREEDM® One Cable

10 Defines special requirements.

A1 = Riser/interlocking armor

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.



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