

FREEDM® Loose Tube Cable with Interlocking Armor

An Evolant™ Solutions Product

Corning
Cable Systems

Applications

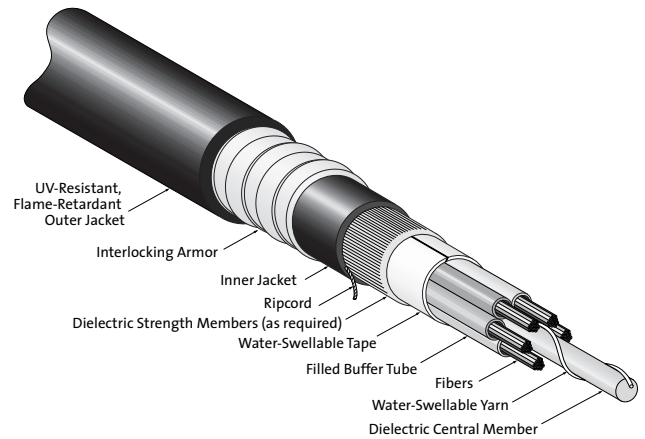
- Inter- and intrabuilding backbones in aerial, duct and riser applications
- Industrial and heavy traffic areas
- Installations requiring extra protection for optical cables

Description

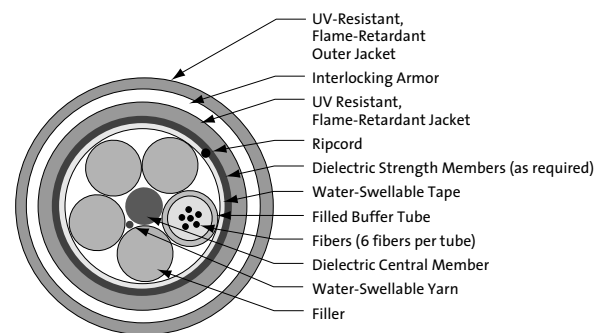
Corning Cable Systems' FREEDM® Loose Tube Cables with interlocking armor are standard FREEDM Cables encased in a spirally wrapped interlocking metal tape for ruggedness and superior crush resistance. They are flame-retardant, UV-stabilized and fully waterblocked for use in indoor/outdoor applications. They are suitable for installation in duct and riser environments. Because they meet the UL-1666 OFCR specification, there is no need for a transition splice when entering the building. Available from 2 to 288 fibers, the interlocking armored FREEDM Cable buffer tubes and the fibers inside are color-coded for quick, easy identification.

Features / Benefits

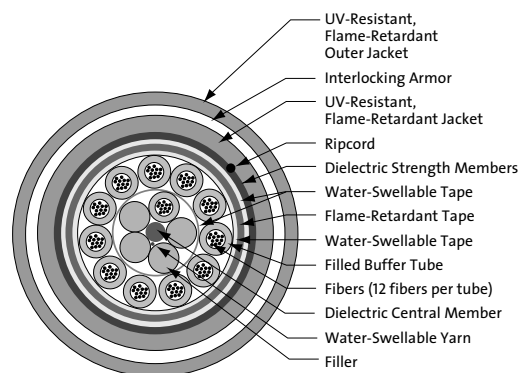
- Cable features innovative waterblocking technology which eliminates the need for traditional flooding compound, providing more efficient and craft-friendly cable preparation
- Available in 62.5 μm , 50 μm , single-mode and hybrid versions
- Standard 3.0 mm buffer tube size reduces the number of access tools required by craftspersons
- SZ-stranded, loose tube design isolates fibers from installation, environmental rigors and allows for easy mid-span access
- Ideal for high-fiber-count trunking applications, especially in areas with limited conduit or vault space
- UV-resistant and listed OFCR and FT-4
- Flexible interlocking armor offers superior crush resistance and cable protection
- Armored design allows easy one-step installation of protected cable



FREEDM Loose Tube Cable with Interlocking Armor | Drawing ZA-2107



6-Fiber FREEDM Loose Tube Cable with Interlocking Armor with Outer Jacket | Drawing ZA-2595



144-Fiber FREEDM Loose Tube Cable with Interlocking Armor with Outer Jacket | Drawing ZA-2109

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Specifications

Maximum Tensile Loads	Short-Term: 2700 N (600 lbf) Long-Term: 600 N (135 lbf)
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	NEC® OFCR, CSA OFN FT-4, UL-1666 OFCR
Design and Test Criteria	ANSI/ICEA S-104-696
Common Installations	Outdoor aerial, direct buried and duct; indoor vertical riser and general purpose horizontal according to NEC Article 770

* 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 Weight kg/km (lb/1000 ft)	Nominal Diameter mm (in)	Minimum Bend Radius	
			Loaded cm (in)	Installed cm (in)
≤ 30	342 (229)	21.7 (0.85)	32.6 (12.8)	21.7 (8.5)
36	362 (243)	21.7 (0.85)	32.6 (12.8)	21.7 (8.5)
48	342 (229)	21.7 (0.85)	32.6 (12.8)	21.7 (8.5)
72	362 (243)	21.7 (0.85)	32.6 (12.8)	21.7 (8.5)
96	442 (297)	23.1 (0.91)	34.7 (13.6)	23.1 (9.1)
108	515 (346)	25.6 (1.01)	38.4 (15.1)	25.6 (10.1)
144	543 (365)	27.7 (1.09)	41.6 (16.4)	27.7 (10.9)
216	571 (383)	27.7 (1.09)	41.6 (16.4)	27.7 (10.9)
240	609 (409)	28.8 (1.13)	43.2 (17.0)	28.8 (11.3)
288	702 (471)	31.4 (1.24)	47.1 (18.5)	31.4 (12.4)

Transmission Performance

Fiber Type	62.5/125 μm (850/1300 nm)	62.5/125 μm (850/1300 nm)	62.5/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	Single-mode (1310/1550 nm)
Performance Option Code	10	30	50	31	40	80	01
Maximum Attenuation (dB/km)	3.5/1.0	3.5/1.0	3.5/1.0	3.5/1.5	3.5/1.5	3.5/1.5	0.4/0.3
Minimum LED Bandwidth (MHz•km)	160/500	200/500	200/500	500/500	700/500	1500/500	- / -
Minimum Effective Modal Bandwidth (MHz•km)	- / -	220/ -	385/ -	510 / -	850/ -	2000/ -	- / -
Serial Gigabit Ethernet Distance Guarantee (m)	220/550	300/550	500/1000	600/600	750/600	1000/600	5000/ -
Serial 10 Gigabit Ethernet Distance Guarantee (m)	26/ -	33/ -	33/ -	82/ -	150/ -	300/ -	10000/40000

Ordering Information

WF - 141 - AA1

1

2

3

1 Select fiber count.

002 to 288

2 Select fiber type.

K = 62.5/125 μm
C = 50/125 μm
S = 50/125 μm
E = Single-mode

3 Select performance option code.

10 = 62.5/125 μm
30 = 62.5/125 μm
50 = 62.5/125 μm
31 = 50/125 μm
40 = 50/125 μm
80 = 50/125 μm
01 = Single-mode

Note: See Transmission Performance above.



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