

FREEDM® Loose Tube Cables

A LANscape® Solutions Product

Corning
Cable Systems

Applications

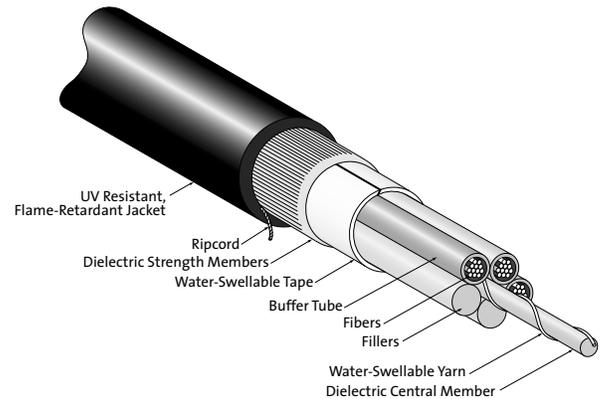
- Campus backbones in aerial, duct and riser applications

Description

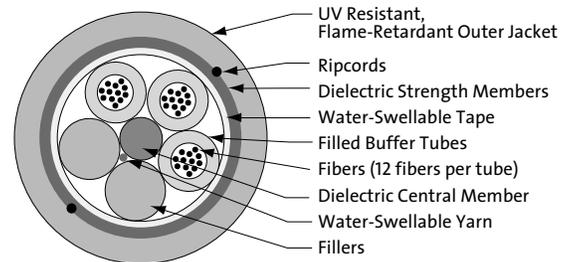
Corning Cable Systems FREEDM® Loose Tube Cables are flame-retardant, UV-stabilized and fully waterblocked for use in indoor/outdoor applications. They are suitable for installation in duct, aerial and riser environments. Because they are riser-rated cables, there is no need for a transition splice when entering the building. Available from 2 to 288 fibers, the FREEDM Loose Tube Cable buffer tubes and the fibers inside are color-coded for quick, easy identification.

Features / Benefits

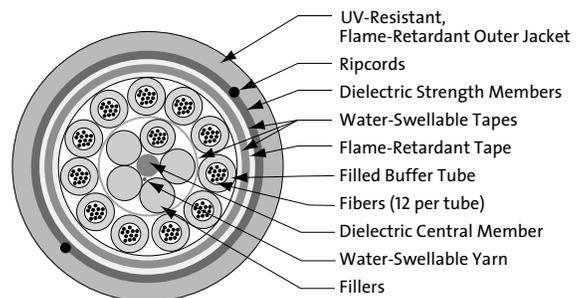
- Innovative Dry™ Cable with waterblocking technology eliminates the need for traditional flooding compound, providing more efficient and craft-friendly cable preparation
- Available in 62.5 μm , 50 μm , single-mode and hybrid versions
- Standard 3.0 mm buffer tube size reduces the number of access tools required by craftspersons
- SZ-stranded, loose tube design isolates fibers from installation, environmental rigors and allows for easy mid-span access
- UV-resistant, flame-retardant jacket is rugged, durable and easy to strip
- All-dielectric cable construction requires no grounding or bonding
- Color-coded fibers and buffer tubes for quick and easy identification during installation
- Listed OFNR and FT-4
- Available with interlocking armor
- Available with Gigabit Ethernet and 10 Gigabit Ethernet performance



FREEDM Loose Tube Cable | Drawing ZA-1894



36-Fiber FREEDM Loose Tube Cable | Drawing ZA-1596



144-Fiber FREEDM Loose Tube Cable | Drawing ZA-511

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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® OFNR, CSA OFN 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-83-596, ANSI/ICEA S-104-696

*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	Maximum Fibers per Tube	Number of Tube Positions	Central Member	Nominal Weight kg/km (lb/1000 ft)	Nominal Outer Diameter mm (in)	Minimum Bend Radius Loaded cm (in)	Installed cm (in)
≤ 60	12	5	Dielectric	166 (111)	13.1 (0.52)	19.7 (7.8)	13.1 (5.2)
72	12	6	Dielectric	185 (124)	13.8 (0.54)	20.7 (8.2)	13.8 (5.4)
96	12	8	Dielectric	245 (164)	15.9 (0.63)	23.9 (9.5)	15.9 (6.3)
120	12	10	Dielectric	294 (197)	17.7 (0.70)	26.6 (10.5)	17.7 (7.0)
144	12	16	Dielectric	313 (210)	19.3 (0.76)	29.0 (11.4)	19.3 (7.6)
216	12	18	Dielectric	341 (229)	20.1 (0.79)	30.2 (11.9)	20.1 (7.9)
240	12	20	Dielectric	370 (248)	20.9 (0.82)	31.4 (12.3)	20.9 (8.2)
288	12	24	Dielectric	442 (296)	23.1 (0.91)	34.7 (13.7)	23.1 (9.1)

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 (m)	220/550	300/550	500/1000	600/600	750/600	1000/600	5000/ -
Serial 10 Gigabit Ethernet Distance (m)	26/ -	33/ -	33/ -	82/ -	150/ -	300/ -	10000/40000

*EMB when deployed with 850 nm, 1 Gb/s VCSELs, as predicted by RML Bandwidth using FOTP-204.

**EMB when deployed with 850 nm, 10 Gb/s VCSELs, as predicted by DMD method using FOTP-220.

Ordering Information

WF - T41 A20

1

2

3

1 Select fiber count.

Standard Offerings:
036 072 144 216
048 096 192 288

Contact Customer Service for availability of non-standard offerings.

2 Select fiber type.

K = 62.5/125 μm
C = 50/125 μm (use with performance option code 31)
S = 50/125 μm (use with performance option codes 40, 80)
R = 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: Use with Buffer Tube Fan-Out Kit for direct termination applications.

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