

FREEDM® One Plenum Cables

A LANscape® Pretium™ Solutions Product

Corning
Cable Systems

Description

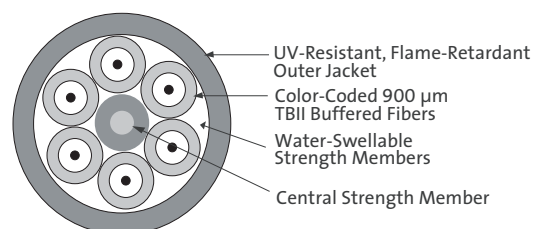
Corning Cable Systems FREEDM® One Plenum Cables are OFNP/FT-6 listed, UV-resistant and fully waterblocked for indoor/outdoor applications. They are suitable for duct and aerial installations with no need for a transition splice when entering the building. Available in fiber counts of six, 12 and 24 fibers, the tight-buffered construction facilitates easier termination for low-fiber-count applications in the local area network (LAN).

Features / Benefits

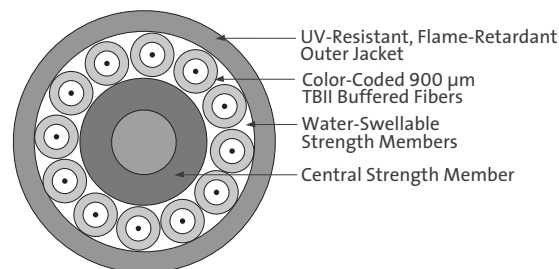
- Eliminates cable transition at the building entrance, reducing installation time and cost in addition to increasing operation margin
- Tight-buffered design eliminates need for fan-out kits
- TIA-598 color-coded 900 µm TBII® Buffered Fibers for easy identification and direct termination
- Small diameter 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
- Dry™ Cable waterblocking technology for OSP applications
- OFNP and FT-6 listed for plenum, riser and general purpose use
- Available with 62.5 µm, 50 µm and single-mode fiber
- ICEA S-104-696 test criteria
- Also available in interlocking armor



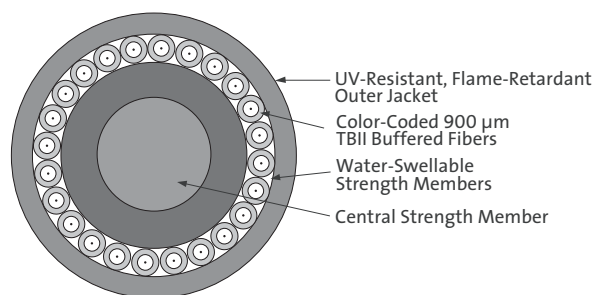
FREEDM One Plenum Cable | Photo LAN380



6-Fiber FREEDM One Plenum Cable | Drawing ZA-2630



12-Fiber FREEDM One Plenum Cable | Drawing ZA-2630



24-Fiber FREEDM One Plenum Cable | Drawing ZA-2630



Product Specifications

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Specifications

Temperatures	Storage: -40° to +70°C (-40° to +158°F) Installation: 0° to +60°C (+32° to +140°F) Operation: -40° to +70°C (-40° to +158°F)					
Approvals and Listings	National Electrical Code® (NEC®) OFNP, CSA FT-6					
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 Loaded cm (in)	Minimum Bend Radius Installed cm (in)	Maximum Tensile Loads Short-Term N (lbf)	Maximum Tensile Loads Long-Term N (lbf)
6	37 (25)	6.2 (0.24)	9.2 (3.6)	6.2 (2.4)	1335 (300)	400 (90)
12	59 (40)	7.3 (0.28)	11.0 (4.3)	7.3 (2.8)	1335 (300)	400 (90)
24	141 (95)	10.9 (0.43)	21.8 (8.6)	10.9 (4.3)	2670 (600)	801 (180)

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.

Transmission Performance

Fiber Code	K	C	S	S	E
Performance Option Code	30	31	80	90	31
Fiber Type	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 (1310/1383/1550 nm)
Maximum Attenuation (dB/km)	3.5/1.0	3.5/1.5	3.0/1.5	3.0/1.5	1.0/1.0/0.75
Minimum LED Bandwidth (MHz•km)	200/500	500/500	1500/500	1500/500	- / - / -
Minimum Effective Modal Bandwidth (MHz•km)	220/ - *	510/ - *	2000/ - *	4700/ -	- / - / -
Serial Gigabit Ethernet Distance (m)	300/550	600/600	1000/600	1000/600	5000/ - / -
Serial 10 Gigabit Ethernet Distance (m)	33/ -	82/ -	300/ -	550/ -	10000/40000

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

Ordering Information

□ □ □ □ 8 P - 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 or 024).

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.
 8/- = FREEDM® One Cable

6 Defines outer jacket.
 P = Indoor/outdoor plenum

7 Defines fiber placement.
 3 = Standard for FREEDM One Plenum 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