FREEDM® Loose Tube, Gel-Free Cable, Plenum



Corning FREEDM® loose tube gel-free plenum cables are flameretardant, indoor/outdoor, plenum-rated cables suitable for installation in interbuilding and intrabuilding backbones in aerial, duct and riser or plenum applications. The loose tube design offers mechanical ruggedness and environmental durability while the all-dielectric cable construction requires no grounding or bonding. The water-swellable yarn eliminates the need for gel-filling compound and allows more efficient and craft-friendly cable preparation. The 250 μm color-coded fibers allow quick and easy identification during installation. The flexible, flame-retardant outer jacket is UV-resistant and enables direct exposure to sunlight. Interlocking armor is available for special applications requiring additional mechanical durability. The plenum rating of this cable eliminates the need to transition splice when entering the building and minimizes routing restrictions once inside the building. Meeting the requirements of the National Electrical Code® (NEC®) Article 770, the cables are also OFNP and FT-6 listed.

Features and Benefits

Gel-free waterblocking technology

Craft-friendly cable preparation

Loose tube design

Stable performance and compatibility with all common fiber types

Color-coded fibers

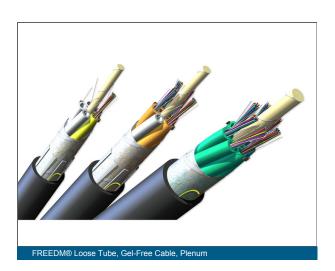
Quick and easy identification

All-dielectric construction

Requires no grounding or bonding

Common installations

Outdoor aerial and duct



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Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

Specifications

General Specifications				
Environment	Indoor/Outdoor			
Product Type	Dielectric			
Cable Type	Loose Tube			
Flame Rating	Plenum (OFCP)			

Temperature Range	
Temperature Range, Storage	-40 °C - 70 °C (-40 °F - 158 °F)
Temperature Range, Installation	0 °C - 60 °C (32 °F - 140 °F)
Temperature Range, Operation	-40 °C - 70 °C (-40 °F - 158 °F)

Design Characteristics Cable						
Fiber Count	Fibers per Tube	Number of Tube Positions	Number of Active Tubes	Buffer Tube Diameter		
6	6	6	1	3 mm		
12 - 72	12	6	1 - 6	3 mm		

Mechanical Characteristics Cable								
F	Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short- Term	Max. Tensile Strength, Long- Term	Cable Weight	
6	6 - 60	13.4 mm	171 mm	114 mm	2700 N	810 N	207 kg/ km	

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Mechanical Characteristics Cable								
Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short- Term	Max. Tensile Strength, Long- Term	Cable Weight		
72	13.8 mm	177 mm	118 mm	2700 N	810 N	225 kg/ km		

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1	2	3	4	5	6	7	8	9	10	

- 1 Select fiber count.
 - Standard offerings:
 - 006 024 048 072 012 036 060
- 2 Select fiber code.
 - K = 62.5 μm multimode (OM1)
 - T = 50 μ m multimode (OM2/OM3/OM4/OM4+)
 - E = Single-mode (OS2) SMF-28e+®
 - Z = Single-mode (OS2) SMF-28® Ultra fiber
- 3 Select cable type. Loose tube cable
 - S = Fiber count ≤ 12 W= Fiber counts 24-72

- 4 Defines outer jacket.
 - P = Plenum
- 5 Defines fiber placement.
 - T = 12 fibers/buffer tube (standard)
- 6 Defines length markings.
 - 4 = Markings in ft (standard)
- 7 Defines tensile strength.
 - 1 = See specifications

- Select performance option code.
 - 30 = 62.5 μm multimode (OM1)
 - $31 = 50 \mu m \text{ multimode (OM2)}$
 - $80 = 50 \mu m \text{ multimode (OM3)}$
 - 90 = 50 µm multimode (OM4)
 - 91 = 50 μm multimode (OM4+)
 - 01 = Single-mode (OS2)
 - (Max. attenuation 0.4/0.4/0.3 dB/km)
- Defines cable type.
 - D = Gel-free cable
- 10 Defines special requirements.
 - 20 = No special requirements



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