

MIC[®] Unitized Plenum Cables 36-144 Fiber

A LANscape[®] Pretium[™] Solutions Product



Corning
Cable Systems

Applications

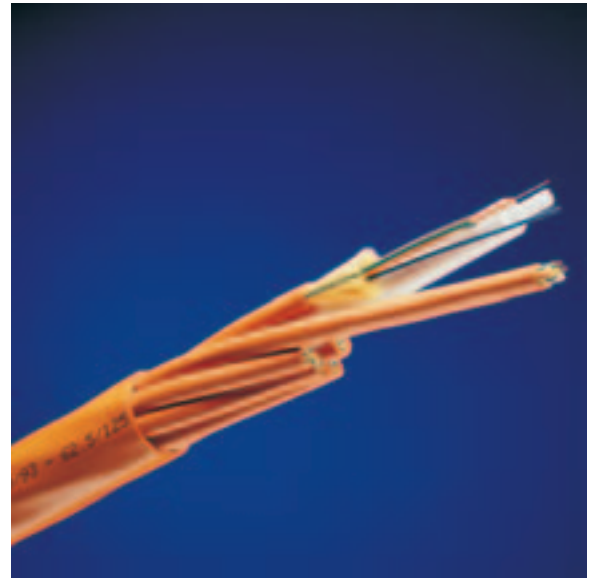
- Intra-building backbone installations in plenum, riser and general purpose environments

Description

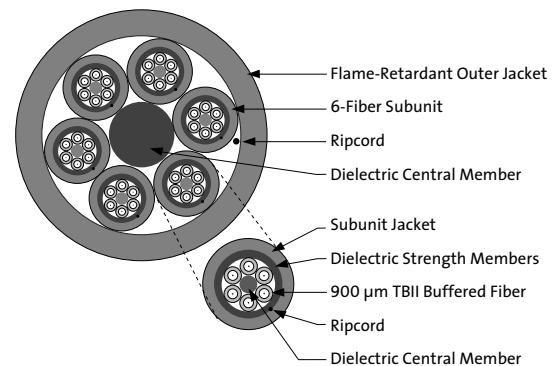
Corning Cable Systems MIC[®] Unitized Plenum Cables are multifiber cables with stranded subunits of six or twelve 900 μm TBII[®] Buffered Fibers surrounded by a dielectric strength member and a flame-retardant outer jacket. These cables meet the application requirements of the National Electrical Code[®] (NEC[®] Article 770) and are OFNP and FT-6 listed. They are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations.

Features / Benefits

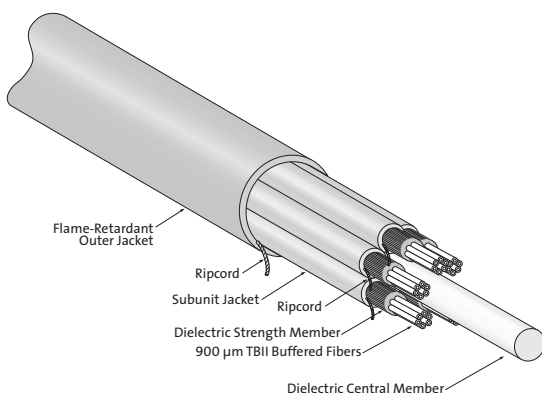
- Stranded subunits of six or twelve 900 μm fibers
- TBII Buffered Fibers enable easy, consistent stripping
- Available in 62.5 μm, 50 μm, single-mode and hybrid versions
- All-dielectric cable construction requires no grounding or bonding
- Available with interlocking armor up to 72 fibers
- Meets application requirements of the National Electrical Code (NEC Article 770)
- Listed OFNP and FT-6
- Available with Gigabit Ethernet and 10 Gigabit Ethernet performance



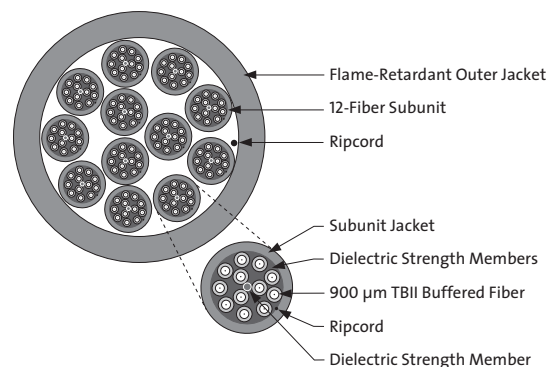
MIC Unitized Plenum Cable | Photo CLT17



36-Fiber MIC Unitized OFNP Cable | Drawing ZA-2708



MIC Unitized Plenum Cable | ZA-1895



144-Fiber MIC Unitized OFNP Cable | Drawing ZA-1900



Product Specifications

MIC® Unitized Plenum Cables

36-144 Fiber

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Specifications

Maximum Tensile Loads	Short-Term: 660 N (148 lbf) Long-Term: 198 N (45 lbf)
Temperatures	Storage: -40° to +70°C (-40° to +158°F) Installation: 0° to +60°C (+32° to +140°F) Operation: 0° to +70°C (+32° to +158°F)
Approvals and Listings	National Electrical Code® (NEC®) OFNP, CSA FT-6, ICEA S-83-596
Flame Resistance	NFPA 262 (for plenum, riser and general building applications)

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	Unit Count	Nominal Outer Diameter mm (in)	Nominal Weight kg/km (lb/1000 ft)	Central Member	Minimum Bend Radius Loaded cm (in)	Minimum Bend Radius Installed cm (in)
6-Fiber Subunits						
36	6	14.7 (0.58)	225 (151)	JG	22.1 (8.7)	14.7 (5.8)
48	8	17.5 (0.69)	321 (215)	JG	26.3 (10.4)	17.5 (6.9)
12-Fiber Subunits						
60	5	17.9 (0.71)	285 (192)	JG	26.9 (10.6)	17.9 (7.0)
72	6	18.7 (0.74)	341 (229)	JG	28.1 (11.0)	18.7 (7.4)
96	8	23.1 (0.91)	499 (335)	JG	34.7 (13.6)	23.1 (9.1)
144	12 (9/3)	23.8 (0.94)	509 (342)	–	35.7 (14.1)	23.8 (9.4)

Central Member Types: G = Glass Reinforced Plastic (GRP), JG = Jacketed GRP

Fiber arrangement in dual-layer designs is shown in parentheses. Example: (9/3) = nine outside fibers around three inner fibers.

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

* As predicted by RML BW, per TIA/EIA 455-204 and IEC 60793-1-41, for intermediate performance laser-based systems (up to 1 Gb/s).

** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).

*** As predicted by minEMBc, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).

**** The 550 m distance is equivalent to a 4700 EMB system with standards-compliant transceiver and fiber characteristics, 3.0 dB/km cable attenuation and 1.0 dB total connector loss.



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Ordering Information

Contact Customer Service for other options.

□ □ □ □ 8 8 - □ □ 1 □ □ - 2 9
1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - 3 Select fiber count (036, 048, 060, 072, 096, 144).

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.

8/- = MIC®/MIC Unitized Cable Family

6 Defines outer jacket.

8 = Plenum

7 / 8 Select number of fibers per subunit.

61 = 6 fibers per subunit (036-048 fibers)

T3 = 12 fibers per subunit (060-144 fibers)

9 Defines subunit diameter options.

10 - 11 Select performance option code
(see Transmission Performance Table).

13 - 14 Defines special manufacturing code.

29 = MIC/MIC Unitized Plenum Cables



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