

MIC[®] Tight-Buffered Cables, Plenum, 2-24 Fibers

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Features and Benefits

900 μ m buffered fibers

Easy, consistent stripping

All-dielectric cable construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable

Standards

Listings

National Electrical Code[®]
(NEC[®]) OFNP, FT-6

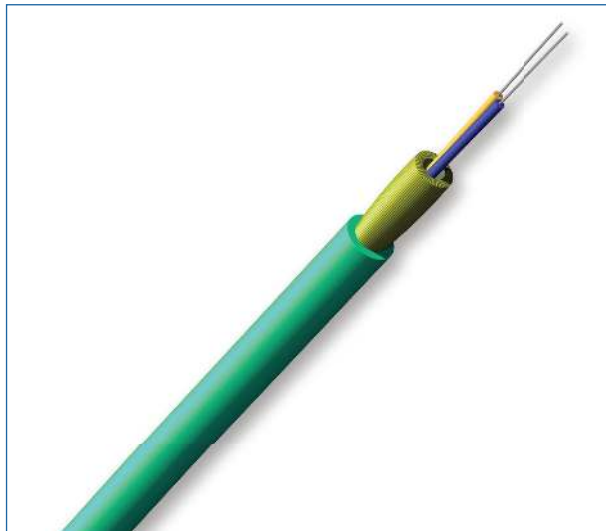
Design and Test Criteria

NFPA 262 and CSA FT-6
(for plenum, riser and general building applications);
ICEA S-83-596

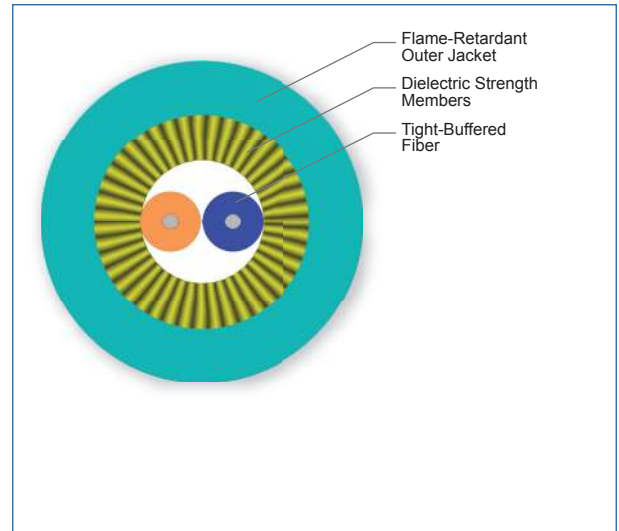
Corning MIC[®] plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900 μ m buffered fibers to allow easy, consistent stripping and to facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding. MIC plenum cables are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations. The MIC plenum cables meet the application requirements of the National Electrical Code[®] (NEC[®]) Article 770 and are OFNP and FT-6 listed.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



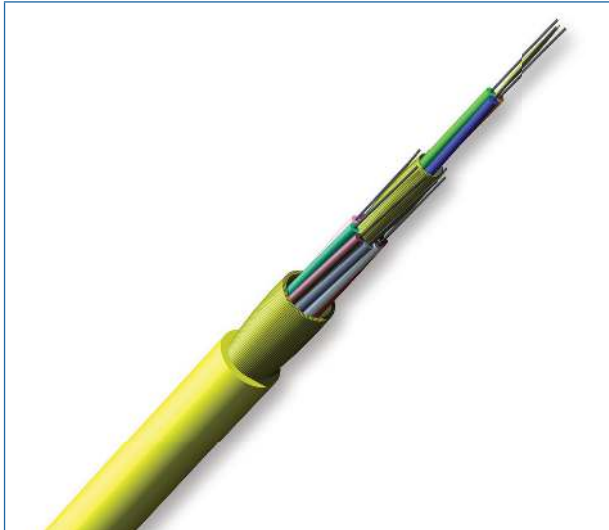
MIC Plenum Cables, 2 Fibers
| Photo PIM0879



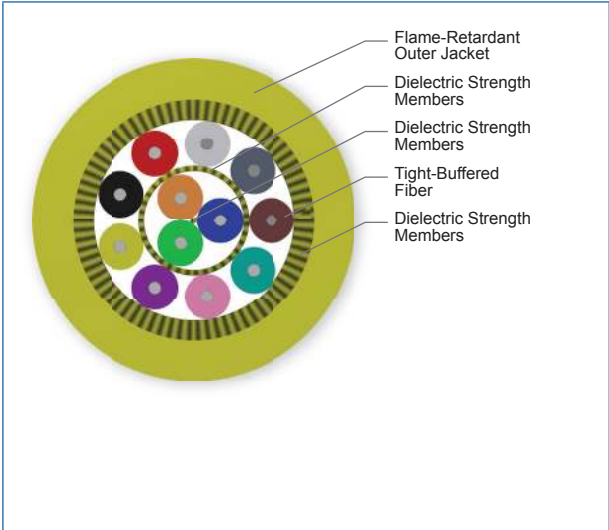
MIC Plenum Cables, 2 Fibers
| Photo PIM1779

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MIC[®] Tight-Buffered Cables, Plenum, 2-24 Fibers



MIC Plenum Cables, 12 Fibers | Photo PIM0889



MIC Plenum Cables, 12 Fibers

Specifications

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

* Note: Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Mechanical Characteristics Cable

Max. Tensile Strength			
Short-Term		Long-Term	
≤12F	>12F	≤12F	>12F
440 N (100 lbf)	660 N (150 lbf)	132 N (30 lbf)	200 N (45 lbf)

Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
Dual-Layer				
12	6.0 mm (0.24 in)	92 mm (3.6 in)	60 mm (2.4 in)	33.8 kg/km (23 lb/1000 ft)
18	7.4 mm (0.29 in)	111 mm (4.4 in)	74 mm (2.9 in)	52.2 kg/km (35 lb/1000 ft)

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Fiber Count	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
24	7.7 mm (0.31 in)	117 mm (4.6 in)	77 mm (3.1 in)	58.3 kg/km (39 lb/1000 ft)
Single-Layer				
2	5 mm (0.2 in)	75 mm (3 in)	50 mm (2 in)	20.1 kg/km (13.5 lb/1000 ft)
4	5.2 mm (0.21 in)	78 mm (3.1 in)	52 mm (2.1 in)	22.2 kg/km (14.9 lb/1000 ft)
6	5.2 mm (0.21 in)	78 mm (3.1 in)	52 mm (2.1 in)	24.2 kg/km (16.3 lb/1000 ft)
8	5.9 mm (0.23 in)	89 mm (3.5 in)	59 mm (2.3 in)	30.0 kg/km (20.2 lb/1000 ft)

Transmission Performance

Multimode					
Fiber Core Diameter (μm)	62.5	50	50	50	50
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance
Fiber Code	K	T	T	T	T
Performance Option Code	30	31	80	90	91
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	2.8/1.0	2.8/1.0	2.8/1.0	2.8/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/600	1000/600	1000/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-	600/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-	5350/-

* 50 μm multimode fiber (OM3/OM4/OM4+) meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

* 50 μm multimode fiber (OM4) T90 10 Gigabit Ethernet distance assumes 1.0 dB maximum total connector/splice loss.

* 50 μm multimode fiber (OM4) T91 10 Gigabit Ethernet Distance assumes 0.7 dB maximum total connector/splice loss.

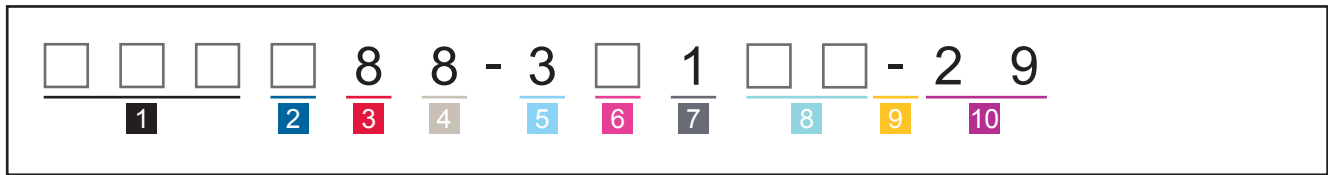
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Single-mode		
Fiber Name	SMF-28e [®] fiber	SMF-28 [®] Ultra fiber
Fiber Category	G.652.D	G.652.D/G.657.A1
Fiber Code	E	Z
Performance Option Code	31	31
Wavelengths (nm)	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.4	0.4/0.4/0.4

- * Improved attenuation and bandwidth options available.
- * Bend-insensitive single-mode fibers available on request.
- * 50 μm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
- * Contact a Corning Customer Care Representative for additional information.

Ordering Information | Note: Contact Customer Care at 1-800-743-2675 for other options.



- 1** Select fiber count.
Standard offerings:
002 006 012 024
004 008 018
- 2** Select fiber code.
K = 62.5 μm multimode (OM1)
T = 50 μm multimode (OM2/OM3/OM4/OM4+)
E = Single-mode (OS2) SMF-28e[®] fiber
Z = Single-mode (OS2) SMF-28[®] Ultra fiber
- 3** Defines cable type.
8 = Standard for MIC[®] cable
- 4** Defines outer jacket.
8 = Standard for plenum
- 5** Defines fiber placement.
3 = Standard
- 6** Select length markings.
1 = Markings in ft (fiber count ≤ 10)
3 = Markings in ft (fiber count > 10)
- 7** Defines tensile strength.
1 = See specifications
- 8** Select performance option code.
30 = 62.5 μm multimode (OM1)
31 = 50 μm multimode (OM2)
80 = 50 μm multimode (OM3)
90 = 50 μm multimode (OM4)
91 = 50 μm multimode (OM4+)
31 = Single-mode (OS2) (Max. attenuation .65 / .65 / 0.5 dB/km)
- 9** Defines cable type.
- = Standard for MIC cable
- 10** Defines special requirements.
29 = Standard for MIC plenum cable

Note: This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

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The CORNING logo is a blue square with the word "CORNING" in white, uppercase, sans-serif font centered inside.

Notes



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