

Ribbon Indoor, Gel-Free Cables, Plenum

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Features and Benefits

Ribbon ID numbers and fiber colors
Easily identifiable

Precise fiber and ribbon geometries
Excellent mass splicing yields

Flame-retardant jacket
Rugged and durable

Available with interlocking armor
Additional mechanical durability

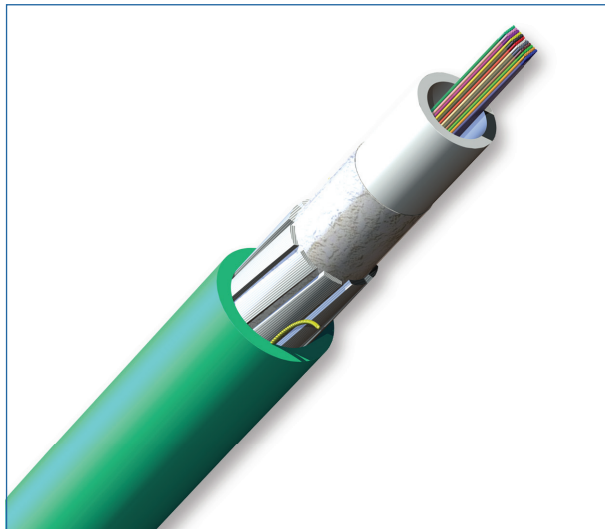
Common installations
Indoor plenum, riser and general building applications

Corning ribbon plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone installations and for high-fiber-count data centers. These cables consist of 12 to 216 fibers organized into 12-fiber ribbons inside a central tube. Dielectric strength members provide tensile strength while a specially formulated flame-retardant outer jacket allows the design to meet the requirements of the NFPA 262 flame test.

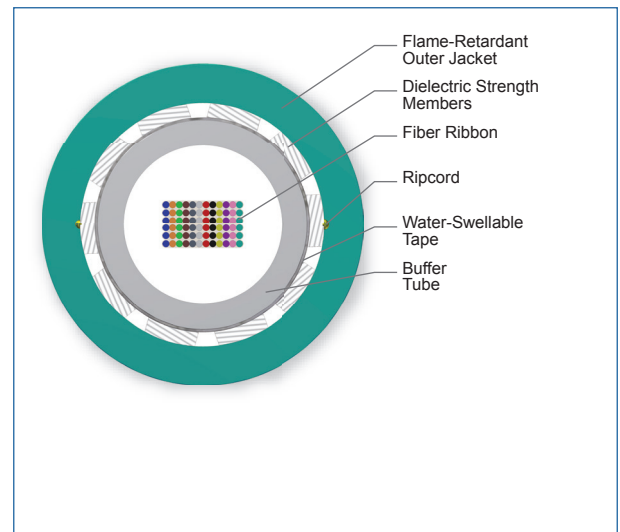
The 12-fiber ribbons have readily identifiable ribbon ID numbers and fiber colors with easy access to individual fibers. Precise fiber and ribbon geometries result in excellent mass splicing yields. The ribbon plenum cables are available preconnectorized for easy field installation and reduced labor costs and are compatible with standard ribbon cable procedures and hardware. These cables are also OFNP and FT-6 listed and RoHS compliant.

Standards

Listings	National Electrical Code® (NEC®) OFNP
Design and Test Criteria	ANSI/ICEA S-83-596, NFPA-262, CSA FT-6



Ribbon Plenum Cables, 72 Fibers | Photo PIM1153

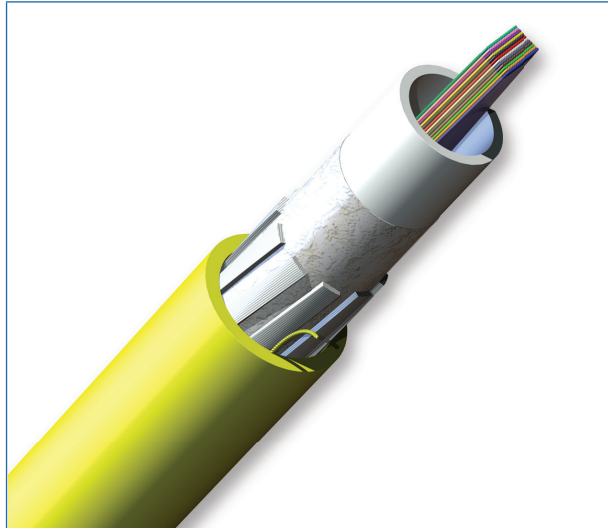


Ribbon Plenum Cables, 72 Fibers | Photo PIM2051

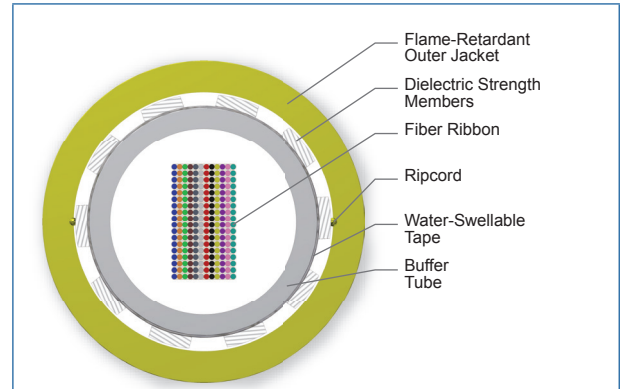
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Ribbon Plenum Cables, 216 Fibers | Photo PIM1160



Ribbon Plenum Cables, 216 Fibers
| Drawing ZA-3920

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	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)

Fiber Count	Buffer Tube Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Weight	Min. Bend Radius Operation
12 - 48	8.1 mm (0.32 in)	9.7 mm (0.38 in)	146 mm (5.7 in)	1320 N (300 lbf)	400 N (90 lbf)	99 kg/km (66 lb/1000 ft)	97 mm (3.8 in)
36	8.1 mm (0.32 in)	9.7 mm (0.38 in)	146 mm (5.7 in)	1320 N (300 lbf)	400 N (90 lbf)	88.8 kg/km (59.7 lb/1000 ft)	97 mm (3.8 in)

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Fiber Count	Buffer Tube Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Weight	Min. Bend Radius Operation
72 - 96	8.1 mm (0.32 in)	12.4 mm (0.49 in)	186 mm (7.3 in)	1320 N (300 lbf)	400 N (90 lbf)	156 kg/km (105 lb/1000 ft)	124 mm (4.9 in)
144 - 216	11 mm (0.43 in)	15.5 mm (0.61 in)	233 mm (9.2 in)	1320 N (300 lbf)	400 N (90 lbf)	220 kg/km (148 lb/1000 ft)	155 mm (6.1 in)

Chemical Characteristics

RoHS

Free of hazardous substances according to RoHS 2002/95/EG

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	3.0/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600	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 (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.

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

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Single-mode		
Fiber Name	Single-mode (OS2)	SMF-28® Ultra fiber
Fiber Category	G.652.D	G.657.A1
Fiber Code	E	Z
Performance Option Code	01	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.3	0.4/0.4/0.3
Typical Attenuation* (dB/km)	-	0.33/0.33/0.19

* 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.

				C	8	-	1	4	1			-	2	0
1	2	3	4	5	6	7	8	9	10					

1 Select fiber count.

Standard offerings:

012 036 072 144
024 048 096 216

2 Select fiber code.

K = 62.5 µm multimode (OM1)
T = 50 µm multimode,
(OM2/OM3/OM4/OM4+)
E = Single-mode (OS2)
SMF-28e+®
Z = Single-mode (OS2)
SMF-28® Ultra fiber

3 Defines cable type.

C = Ribbon cable

4 Defines outer jacket.

8 = Plenum
See Note 1.

5 Defines fiber placement.

1 = Standard

6 Defines length markings.

4 = Markings in ft (standard)

7 Defines tensile strength.

1 = Standard

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+)
01 = Single-mode (OS2)
(Max. attenuation 0.4/0.4/0.3 dB/km)

9 Defines cable type.

- = Gel-free cable

10 Defines special manufacturing code.

20 = No special requirements

Note: Use with ribbon fan-out kits for direct connectorization application.

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The Corning logo consists of a solid blue square with the word "CORNING" in white, uppercase, sans-serif font centered within it.

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Notes



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