

# Ribbon Plenum Cables

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## Features and Benefits

**Precise fiber and ribbon geometries**  
Excellent mass splicing yields

**Ribbon ID numbers and fiber colors**  
Easily identifiable

**Flame-retardant jacket**  
Rugged and durable

**Preconnectorized cable option**  
Reduces installation time

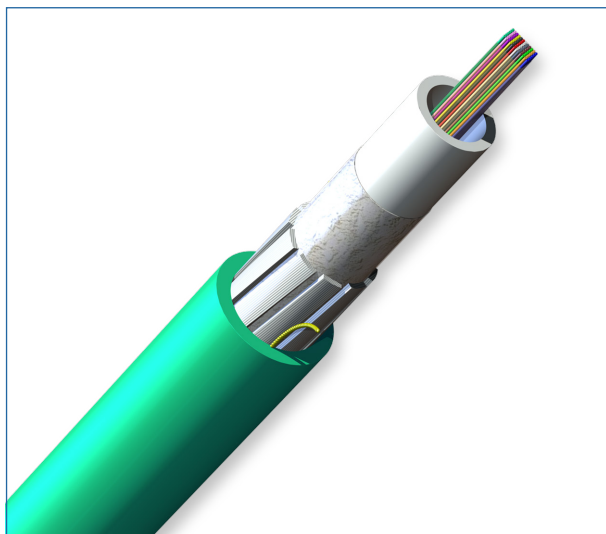
**Available with interlocking armor**  
Additional mechanical durability

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.

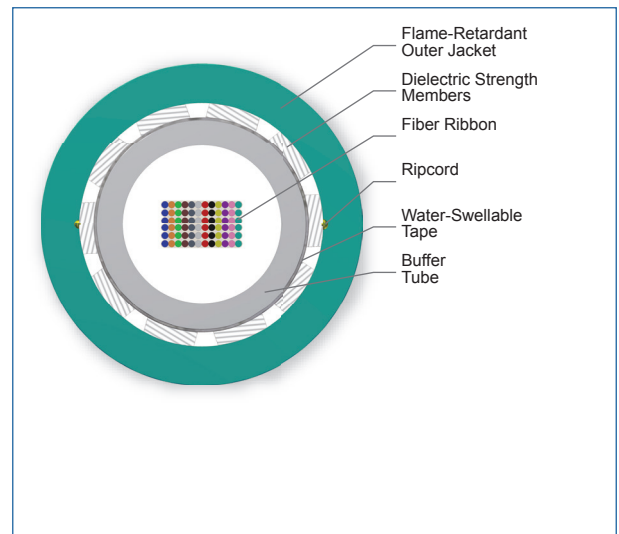
The 12-fiber ribbons have readily identifiable ribbon ID numbers and fiber colors with easy access to individual fibers. Precise fiber and ribbon geometries result in excellent mass splicing yields. The ribbon plenum cables are available preconnectorized for easy field installation and reduced labor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

## Standards

Approval and Listings	National Electrical Code® (NEC®) OFNP, CSA FT-6
Common Installations	Indoor plenum, riser and general building applications
Design and Test Criteria	ANSI/ICEA S-83-596, NFPA-262



Ribbon Plenum Cables, 72 Fibers | Photo PIM1153

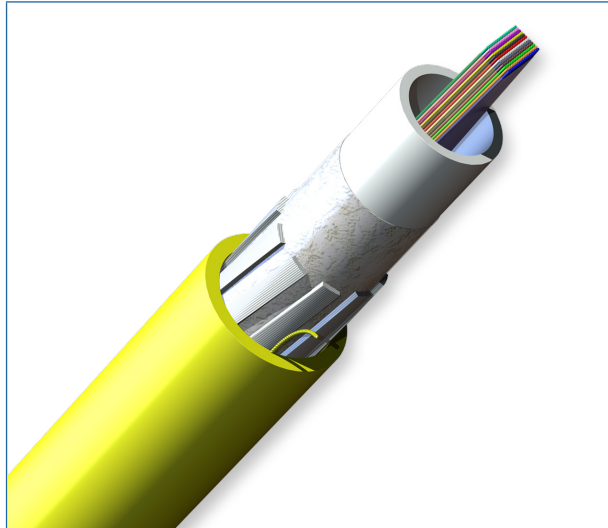


Ribbon Plenum Cables, 72 Fibers | Photo PIM2051

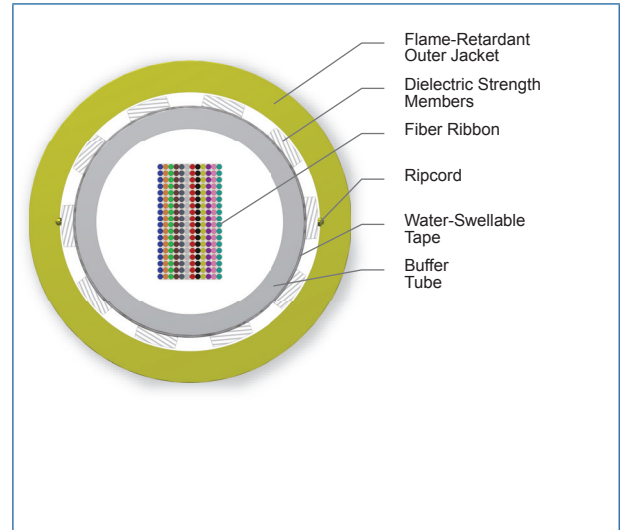
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Ribbon Plenum Cables, 216 Fibers | Photo PIM1160



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.

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

### Mechanical Characteristics Cable

Fiber Count	Product Type	Nominal Outer Diameter	Weight	Min. Bend Radius Installation	Min. Bend Radius Operation
12 - 48	Distribution	9.7 mm (0.38 in)	99 kg/km (66 lb/1000 ft)	146 mm (5.7 in)	97 mm (3.8 in)
72 - 96	Distribution	12.4 mm (0.49 in)	156 kg/km (105 lb/1000 ft)	186 mm (7.3 in)	124 mm (4.9 in)
144 - 216	Distribution	15.5 mm (0.61 in)	220 kg/km (148 lb/1000 ft)	233 mm (9.2 in)	155 mm (6.1 in)

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## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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## 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/-
<b>Single-mode</b>					
Fiber Type	Single-mode				
Fiber Core Diameter (µm)	8.2				
Fiber Category	OS2				
Fiber Code	E				
Performance Option Code	31				
Wavelengths (nm)	1310/1383/1550				
Maximum Attenuation (dB/km)	0.65/0.65/0.5				
Serial 1 Gigabit Ethernet (m)	5000/-/-				
Serial 10 Gigabit Ethernet (m)	10000/-/40000				

\* Single-mode (OS2) fiber is ITU-T G.652.D compliant.

\* 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 and Play™/Pretium EDGE® systems solutions.

Notes: 1) Improved attenuation and bandwidth options available.

2) Bend-insensitive single-mode fibers available on request.

3) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

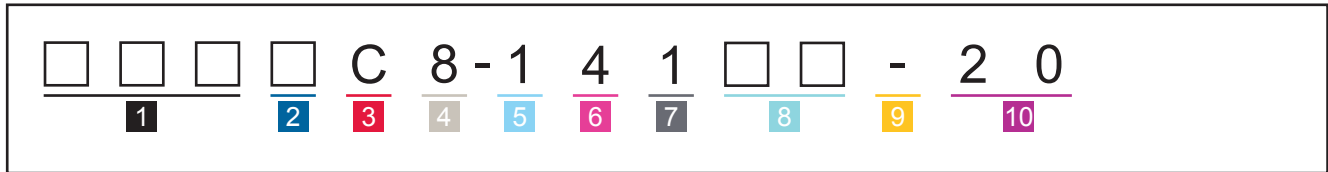
4) Contact a Corning Customer Care Representative for additional information.



# Ribbon Plenum Cables

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



**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+®

**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.

- = Ribbon 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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