Ribbon Plenum Cables

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

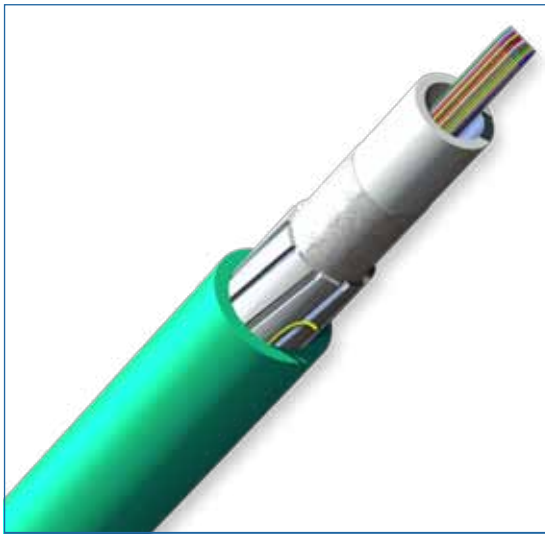
Preconnectorized cable option
Reduces installation time

Available with interlocking armor
Additional mechanical durability

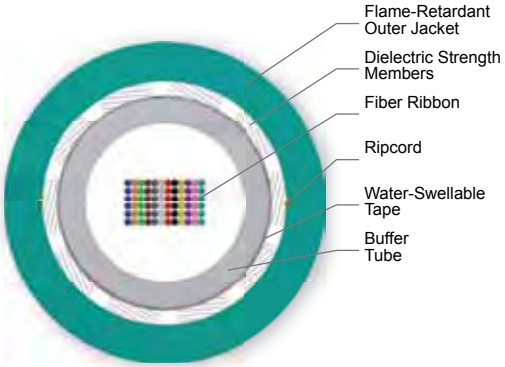
Corning Cable Systems Ribbon Plenum Cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone installations and for high-fiber-count data centers. These cables consist of 12 to 216 fibers organized into 12-fiber ribbons inside a central tube. Dielectric 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. The 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 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



Ribbon Plenum Cables, 72-Fibers

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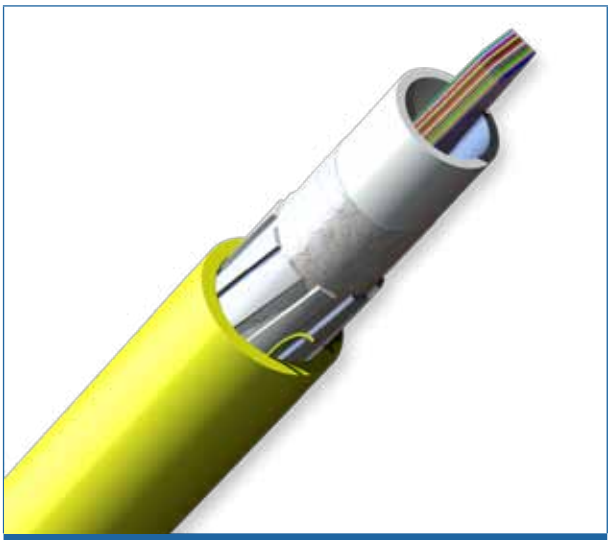
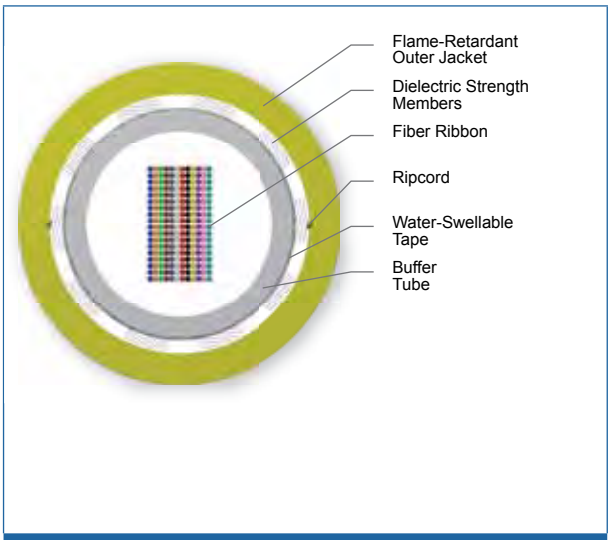


Ribbon Plenum Cables, 216-Fibers



Ribbon Plenum Cables, 216-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)

** Corning Cable Systems 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 Strengths, Short-Term	1320 N (300 lbf)
Max. Tensile Strengths, Long-Term	400 N (90 lbf)

Fiber Count	Product Type	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight
12 - 96	Distribution	12.4 mm (0.49 in)	186 mm (7.3 in)	124 mm (4.9 in)	153 kg/km (103 lb/1000 ft)
144 - 216	Distribution	15.5 mm (0.61 in)	233 mm (9.2 in)	155 mm (6.1 in)	220 kg/km (148 lb/1000 ft)

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

Transmission Performance

Fiber Type Fiber Core Diameter (µm)	Multimode 62.5	Multimode 50	Multimode 50	Multimode 50	Multimode 50	Single-mode 8.2
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance	OS2
Fiber Code	K	T	T	T	T	E
Performance Option Code	30	31	80	90	91	01
Wavelengths (nm)	850 / 1300	850 / 1300	850 / 1300	850 / 1300	850 / 1300	1310 / 1383 / 1550
Maximum Attenuation (dB/km)	3.4 / 1.0	3.0 / 1.0	3.0 / 1.0	3.0 / 1.0	3.0 / 1.0	0.4 / 0.4 / 0.3
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 / -	
Serial 1 Gigabit Ethernet (m)	300 / 550	750 / 600	1000 / 600	1100 / 600	1100 / 600	5000 / - / -
Serial 10 Gigabit Ethernet (m)	33 / -	150 / -	300 / -	550 / -	600 / -	10000 / - / 40000

* Assumes 1.0 dB maximum total connector/splice loss.
* Assumes 0.7 dB maximum total connector/splice loss.
* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.
* *Single-mode (OS2) fiber is ITU-T G.652.D compliant.*

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 Cable Systems Customer Care Representative for additional information.*

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Ordering Information | Contact Customer Care at 1-800-743-2671 for other options.

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

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 feet (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

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

RoHS COMPLIANT

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