

Ruggedized Ribbon Plenum Cables

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Features and Benefits

Precise fiber and ribbon geometries

Excellent mass splicing yields

Meet NEC requirements

Meets burn test criteria

Ribbon ID numbers and fiber colors

Easily identifiable

Dielectric strength members

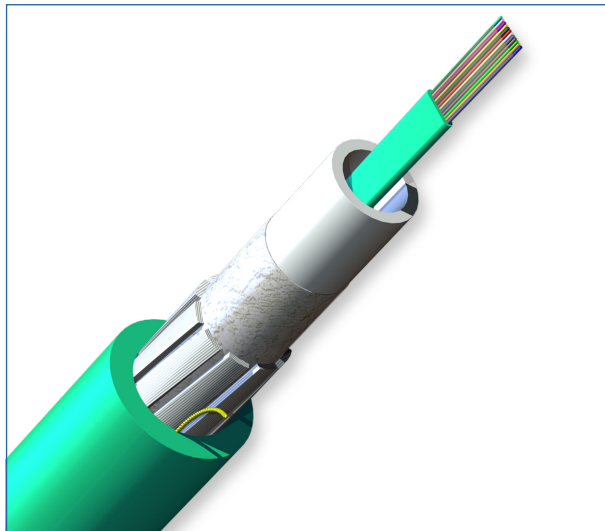
Additional mechanical durability

Standards

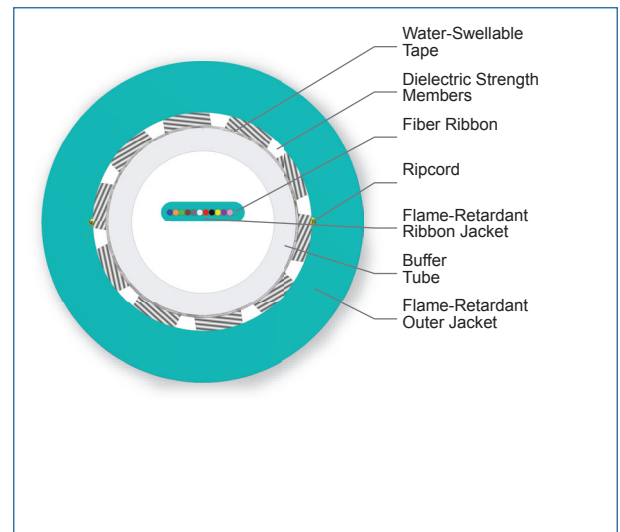
Approval and Listings	National Electrical Code® (NEC®) OFNP
Common Installations	Indoor plenum, riser and general building applications
Design and Test Criteria	ANSI/ICEA S-83-596, NFPA-262

Corning plenum ruggedized ribbon cables are designed for intrabuilding backbones in plenum, riser and general-purpose installation. With a flame-retardant outer jacket that meets the requirements of the National Electric Code (NEC) 770, Article 770-51(A) and NFPA 262 flame tests, the cables are also ideal for data centers and segregating secure traffic on protected distribution systems (PDS).

The cables consist of 12, 24, 36 or 48 fibers organized into easily identifiable 12-fiber ruggedized ribbons inside a central tube with readily identifiable ribbon ID numbers and fiber colors which allow easy access of individual fibers. Dielectric strength members provide tensile strength, and the cables are preconnectorized for easy installation and reduced labor costs. Available in 50 µm, 62.5 µm, single-mode and hybrid versions, these cables are compatible with standard ribbon cable procedures and hardware.



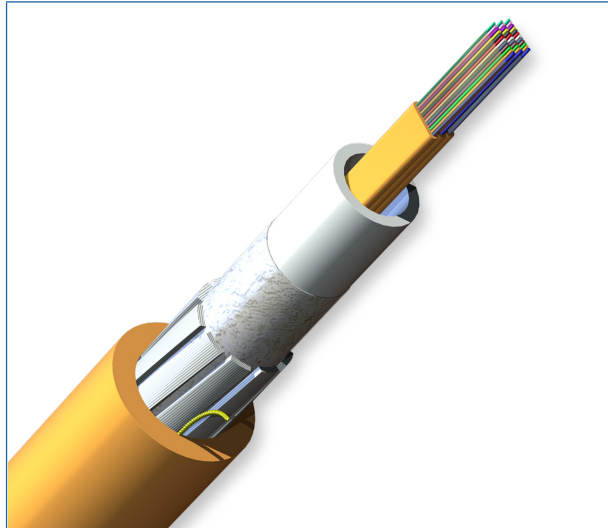
Ruggedized Ribbon Cables, Plenum, 12 Fibers
| Photo PIM1213



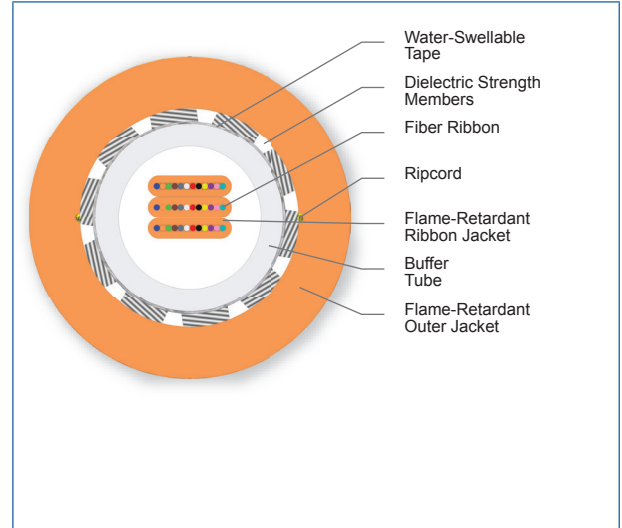
Ruggedized Ribbon Cables, Plenum, 12 Fibers
| Photo PIM2111

Ruggedized Ribbon Plenum Cables

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Ruggedized Ribbon Cables, Plenum, 36 Fibers
| Photo PIM1218



Ruggedized Ribbon Cables, Plenum, 36 Fibers
| Photo PIM2116

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	13.6 mm (0.5 in)	195 kg/km (131 lb/1000 ft)	204 mm (8 in)	136 mm (5.4 in)

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/-

* 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.

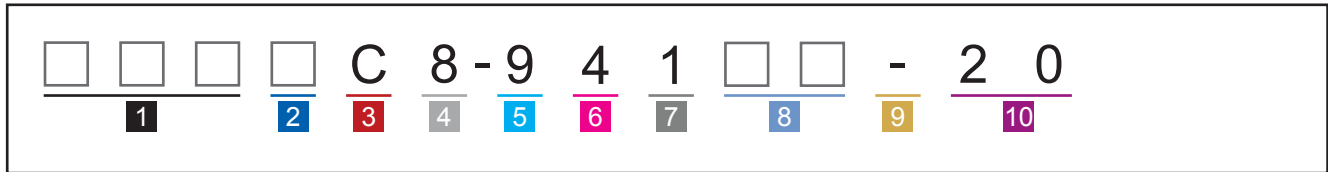
Single-mode	
Fiber Name	SMF-28e+® fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	01
Wavelengths (nm)	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.3
Typical Attenuation* (dB/km)	0.33/0.33/0.19



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



1 Select fiber count.
Standard offerings:
012 024 036 048

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

5 Defines fiber placement.
9 = Ruggedized Ribbon

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 requirements.
20 = No special requirements



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