

Ribbon Indoor, Gel-Free Cables, Riser

CORNING

Features and Benefits

Ribbon ID numbers and fiber colors
Easily identifiable

Precise fiber and ribbon geometries
Excellent mass splicing yields

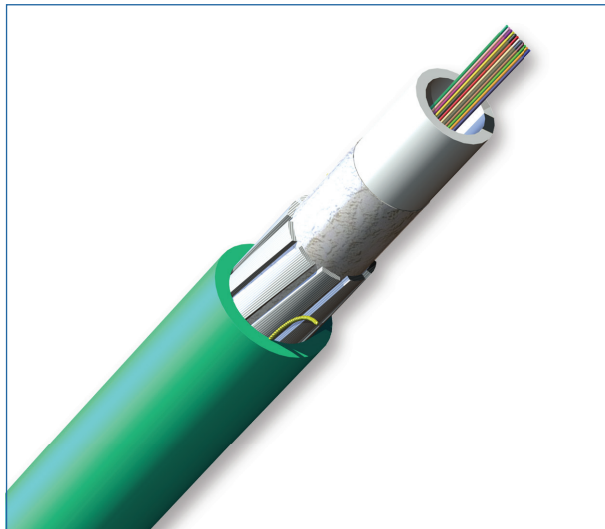
Flame-retardant jacket
Rugged and durable

Common installations
Indoor vertical riser and general purpose horizontal according to National Electrical Code® (NEC®) Article 770

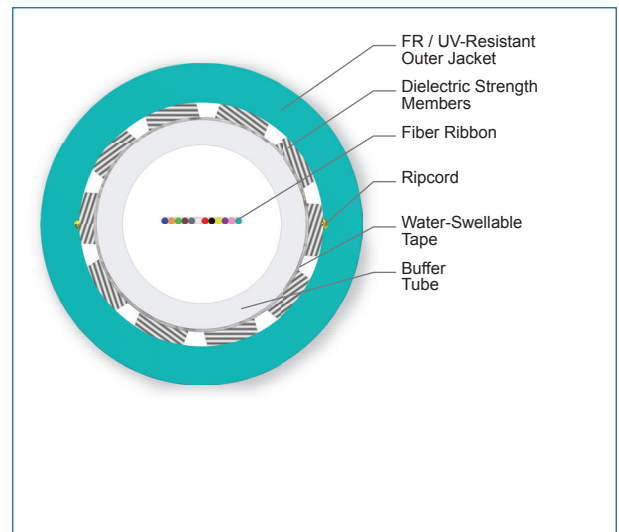
Corning ribbon riser cables are all-dielectric and designed for indoor use. The optical fibers are organized into easily identifiable 12-fiber ribbons inside a central tube. The required tensile strength is provided by dielectric strength elements that are helically stranded around the central tube. The specially formulated, flame-retardant outer jacket and rugged construction of these cables facilitates routing through riser shafts and long horizontal runs inside buildings. These cables are tested using the UL 1666 flame test, meet the application requirements of the National Electrical Code (NEC) and are OFNR and FT-4 listed.

Standards

Listings	National Electrical Code® (NEC®) OFNR
Design and Test Criteria	ANSI/ICEA S-83-596; CSA FT-4



Ribbon Riser Cable, 12 Fibers | Photo PIM1123

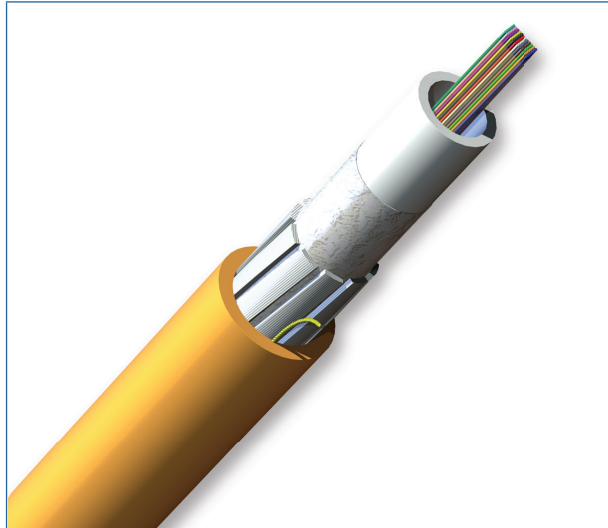


Ribbon Riser Cable, 12 Fibers | Photo PIM2030

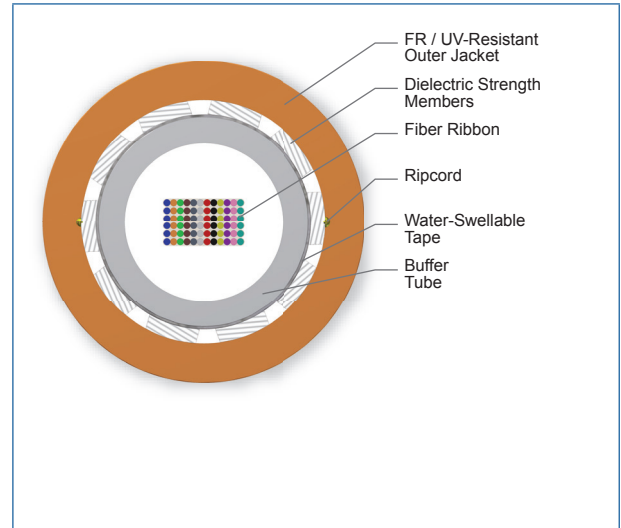
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Ribbon Riser Cable, 72 Fibers | Photo PIM1131



Ribbon Riser Cable, 72 Fibers | Photo PIM2029

Specifications

Temperature Range

Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °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	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Weight	Nominal Outer Diameter
12 - 48	8.1 mm (0.32 in)	146 mm (5.7 in)	97 mm (3.8 in)	1320 N (300 lbf)	400 N (90 lbf)	98 kg/km (70.8 lb/1000 ft)	9.7 mm (0.38 in)
36	8.1 mm (0.32 in)	146 mm (5.7 in)	97 mm (3.8 in)	1320 N (300 lbf)	400 N (90 lbf)	88.8 kg/km (59.7 lb/1000 ft)	9.7 mm (0.38 in)

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Fiber Count	Buffer Tube Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Weight	Nominal Outer Diameter
72 - 96	8.1 mm (0.32 in)	186 mm (7.3 in)	124 mm (4.9 in)	1320 N (300 lbf)	400 N (90 lbf)	156 kg/km (112.8 lb/1000 ft)	12.4 mm (0.49 in)
144 - 216	11 mm (0.43 in)	228 mm (9.0 in)	152 mm (6.0 in)	1320 N (300 lbf)	400 N (90 lbf)	220 kg/km (159.1 lb/1000 ft)	15.2 mm (0.60 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
Fiber Category	OM1	OM2	OM3	OM4 Extended Distance
Fiber Code	K	T	T	T
Performance Option Code	30	31	80	91
Wavelengths (nm)	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
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	600/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	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	7	-	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.
7 = Riser
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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Notes



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