Ribbon Indoor, Gel-Free, Interlocking Armored Cables, Plenum

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

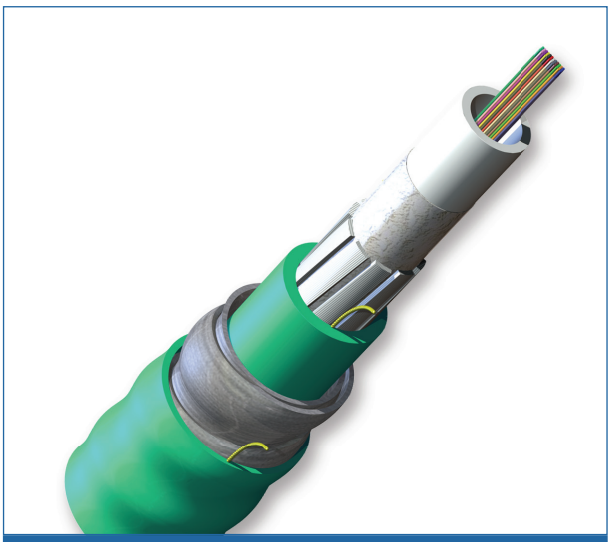
Flexible interlocking armor
Up to seven times the crush protection compared to non-armored cables

Common installations
Indoor plenum, riser and general building applications

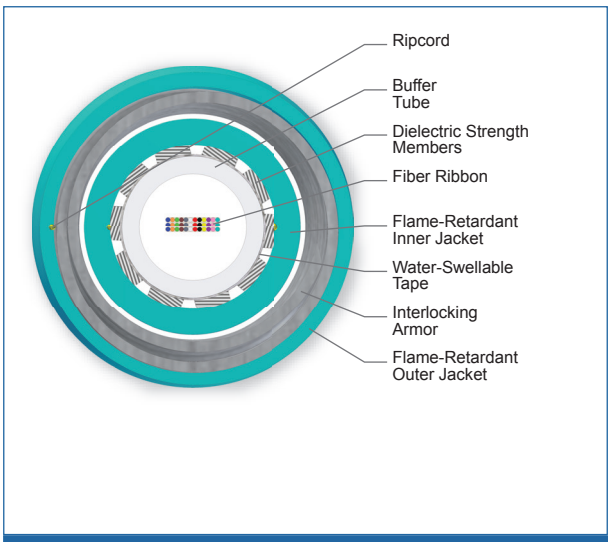
Corning ribbon interlocking armored plenum cables are designed for use in plenum, riser and general-purpose environments for intrabuilding backbone and horizontal installations. These cables are standard ribbon plenum cables placed inside spirally wrapped aluminum interlocking armor for ruggedness and superior crush resistance. This special construction facilitates routing inside buildings, through riser shafts and air-handling spaces, to telecommunication rooms and to workstations. Ideal for heavy traffic or more challenging mechanical exposure conditions, this cable design consists of fibers organized into 12-fiber ribbons inside a central tube surrounded by dielectric strength members to provide tensile strength. The flexible interlocking armor offers up to seven times the crush protection of nonarmored cables, 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.

Standards

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



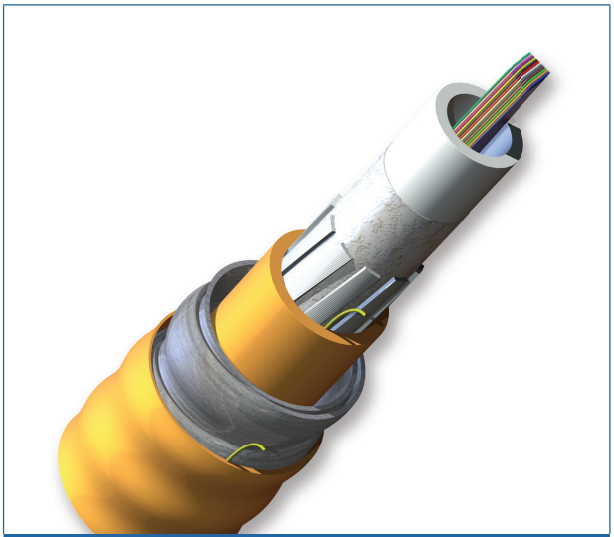
Ribbon Interlocking Armored Plenum Cables, 36 Fibers | Photo PIM1195



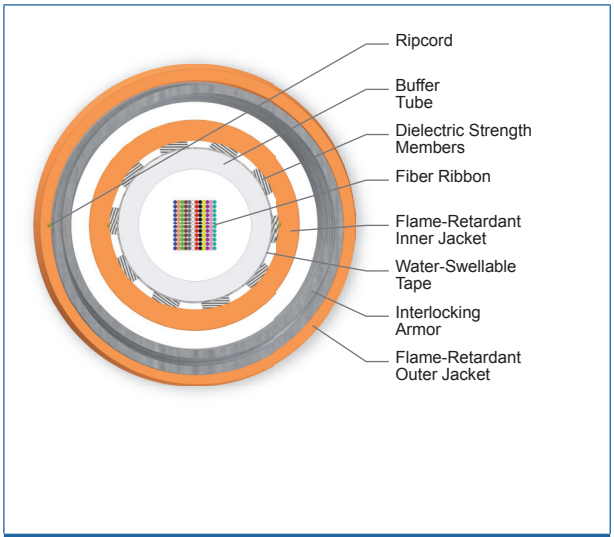
Ribbon Interlocking Armored Plenum Cables, 36 Fibers | Photo PIM2093

CORNING

Ribbon Indoor, Gel-Free, Interlocking Armored Cables, Plenum



Ribbon Interlocking Armored Plenum Cables, 144 Fibers | Photo PIM1206



Ribbon Interlocking Armored Plenum Cables, 144 Fibers | Photo PIM2104

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	Min. Bend Radius Operation	Weight
12 - 48	8.1 mm (0.32 in)	15.7 mm (0.62 in)	235.5 mm (9.3 in)	1320 N (300 lbf)	400 N (90 lbf)	157 mm (6.2 in)	215.15 kg/km (144.57 lb/1000 ft)
72	8.1 mm (0.32 in)	18.8 mm (0.74 in)	282 mm (11.1 in)	1320 N (300 lbf)	400 N (90 lbf)	188 mm (7.4 in)	295 kg/km (198 lb/1000 ft)

Ribbon Indoor, Gel-Free, Interlocking Armored Cables, Plenum

CORNING

Fiber Count	Buffer Tube Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Min. Bend Radius Operation	Weight
96	8.1 mm (0.32 in)	18.8 mm (0.74 in)	282 mm (11.1 in)	1320 N (300 lbf)	400 N (90 lbf)	188 mm (7.4 in)	297 kg/km (200 lb/1000 ft)
144 - 216	11 mm (0.43 in)	22.5 mm (0.89 in)	337.5 mm (14.9 in)	1320 N (300 lbf)	400 N (90 lbf)	225 mm (8.9 in)	400 kg/km (289.3 lb/1000 ft)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

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.*

CORNING

Ribbon Indoor, Gel-Free, Interlocking Armored Cables, Plenum

CORNING

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	□ □	-	A 3
1	2	3	4		5	6	7	8	9	10

1 Select fiber count.
Standard offerings:
012 - 216
Increments of 12

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

4 Defines outer jacket.
8 = Plenum

5 Defines fiber placement.
1 = 12 fibers/buffer tube (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.
- = Gel-free cable

10 Defines special requirements.
A3 = Interlocking armor with plenum-rated outer jacket

CORNING

Ribbon Indoor, Gel-Free, Interlocking Armored Cables, Plenum

CORNING

Notes

RoHS COMPLIANT

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

CORNING