

Ribbon Interlocking Armored 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

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

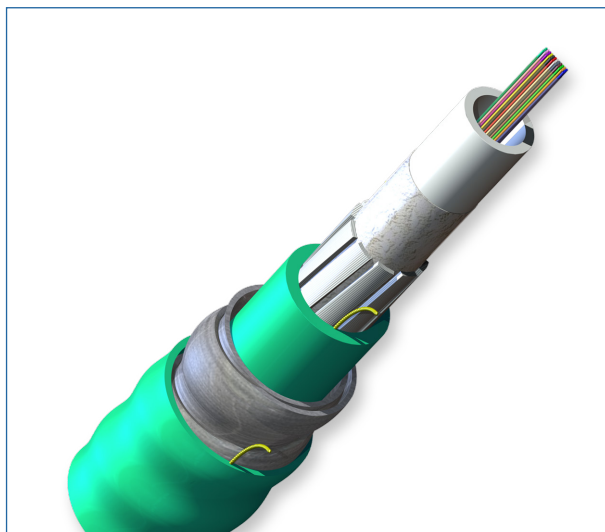
Flame-retardant jacket
Rugged and durable

Standards

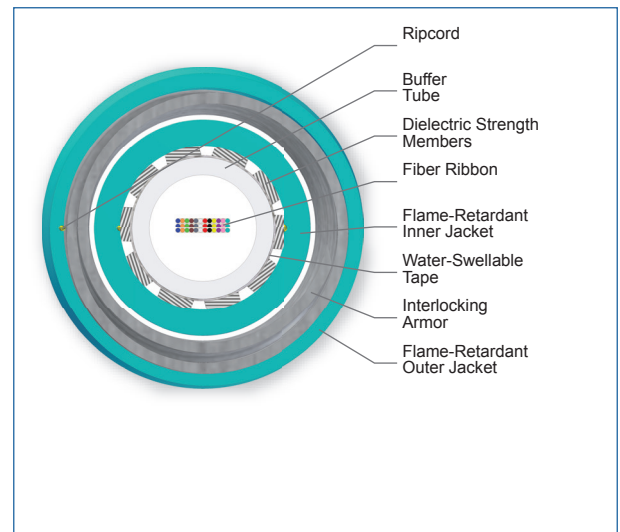
Approval and Listings National Electrical Code® (NEC®) OFCP, CSA FT-6, ANSI/ICEA S-83-596

Flame Resistance NFPA 262 (for plenum, riser and general purpose 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 over 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.



Ribbon Interlocking Armored Plenum Cables, 36 Fibers | Photo PIM1195

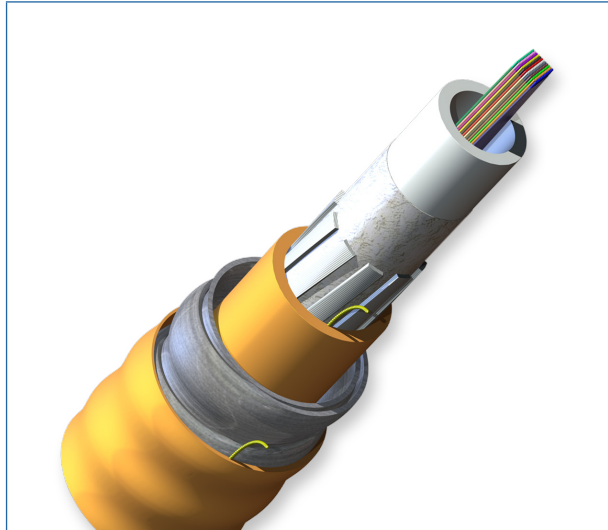


Ribbon Interlocking Armored Plenum Cables, 36 Fibers | Photo PIM2093

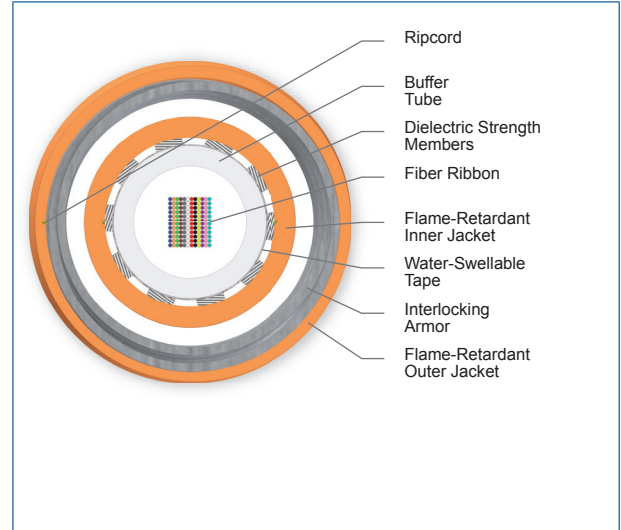
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Ribbon Interlocking Armored Plenum Cables, 144 Fibers | Photo PIM1206



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.

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

Mechanical Characteristics Cable

Fiber Count	Nominal Inner Cable Diameter	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation	Weight	Product Type
12 - 96	12.4 mm (0.49 in)	19.9 mm (0.78 in)	299 mm (11.8 in)	199 mm (7.8 in)	326 kg/km (219 lb/1000 ft)	Interlocking armor
144 - 216	15.5 mm (0.61 in)	23.6 mm (0.93 in)	354 mm (13.9 in)	236 mm (9.3 in)	461 kg/km (310 lb/1000 ft)	Interlocking armor

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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/-

* 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

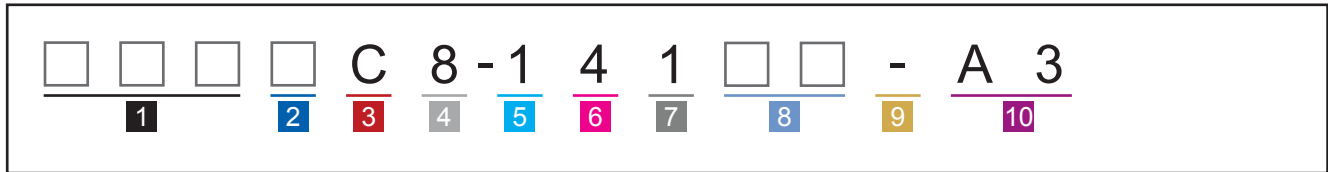
Fiber Name	SMF-28e+® fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	01
Wavelengths (nm)	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.3
Typical Attenuation* (dB/km)	0.33/0.33/0.19

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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 - 216
Increments of 12

2 Select fiber code.

K = 62.5 μ m multimode (OM1)
T = 50 μ m 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.

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 μ m multimode (OM1)
31 = 50 μ m multimode (OM2)
80 = 50 μ m multimode (OM3)
90 = 50 μ m multimode (OM4)
91 = 50 μ m 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.

A3 = Interlocking armor with
plenum-rated outer jacket



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