

Ribbon Interlocking Armored Cable, Plenum

24 F, 50 μ m multimode (OM4)

CORNING

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.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

Features and Benefits

Precise fiber and ribbon geometries

Excellent mass splicing yields

Gel-free waterblocking technology

Craft-friendly cable preparation

Innovative waterblocking technology

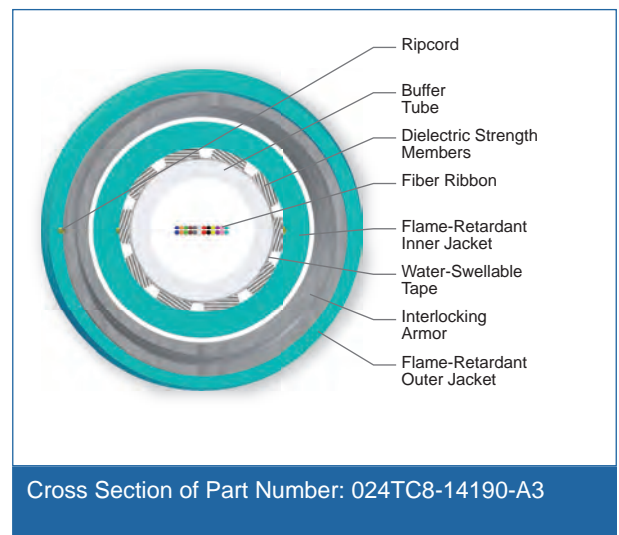
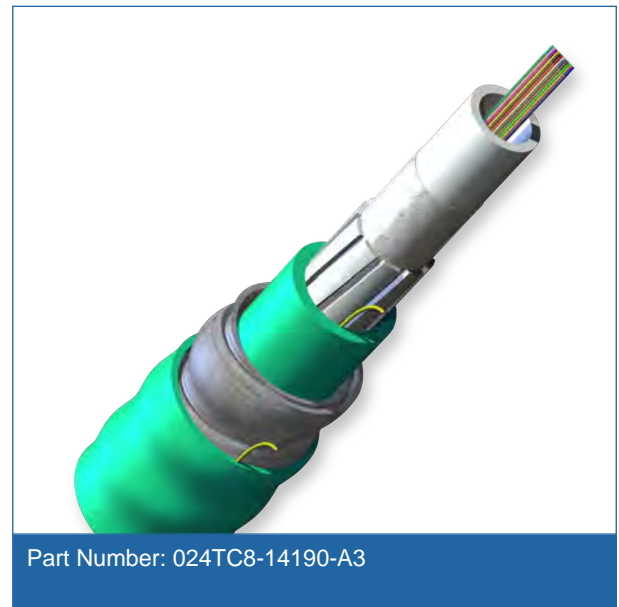
Prevents water penetration

12-fiber ribbons with ribbon IDs

Easy identification

Flame-retardant jacket

Rugged and durable



Standards

Approval and Listings

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

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Standards

Flame Resistance

NFPA 262 (for plenum, riser and general building applications)

Specifications

General Specifications

Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Ribbon
Product Type	Interlocking armor
Flame Rating	Plenum (OFCP)
Fiber Category	50 µm MM (OM4)

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)

Cable Design

Fiber Count	24
Ribbons per Tube	2
Fibers per Ribbon	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Color	Natural
Buffer Tube Diameter	8.1 mm (0.32 in)
Tape	Water-swellaable
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	2
Inner Jacket Material	Flame-retardant
Tensile Strength Elements and/or Armoring - Layer 3	Interlocking armor
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

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Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)
Weight	326 kg/km (219 lb/1000 ft)
Nominal Inner Cable Diameter	12.4 mm (0.49 in)
Nominal Outer Diameter	19.9 mm (0.78 in)
Min. Bend Radius Installation	299 mm (11.8 in)
Min. Bend Radius Operation	199 mm (7.8 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fiber Specifications

Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM4
Fiber Code	T
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

* Assumes 1.0 dB maximum total connector/splice loss.

* Meets 0.75 ns optical skew when used in all Corning Plug and Play™/Pretium EDGE® systems solutions.

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
2) Improved attenuation and bandwidth options available.
3) Bend-insensitive single-mode fibers available on request.
4) Contact a Corning Customer Care Representative for additional information.

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Ordering Information

Part Number	024TC8-14190-A3
Product Description	Ribbon Interlocking Armored Cable, Plenum, 24 F, 50 µm multimode (OM4)



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