

# Ribbon Cable, Plenum

96 F, 50  $\mu$ m multimode, extended 10G distance (OM4+)

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Corning ribbon plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone installations and for high-fiber-count data centers. These cables consist of 12 to 216 fibers organized into 12-fiber ribbons inside a central tube. Dielectric strength members provide tensile strength 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. Precise fiber and ribbon geometries result in excellent mass splicing yields. The ribbon plenum cables are available preconnectorized for easy field installation and reduced labor costs and are compatible with standard ribbon cable procedures and hardware. These cables are also OFNP and FT-6 listed and RoHS compliant.

*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

### Ribbon ID numbers and fiber colors

Easily identifiable

### Flame-retardant jacket

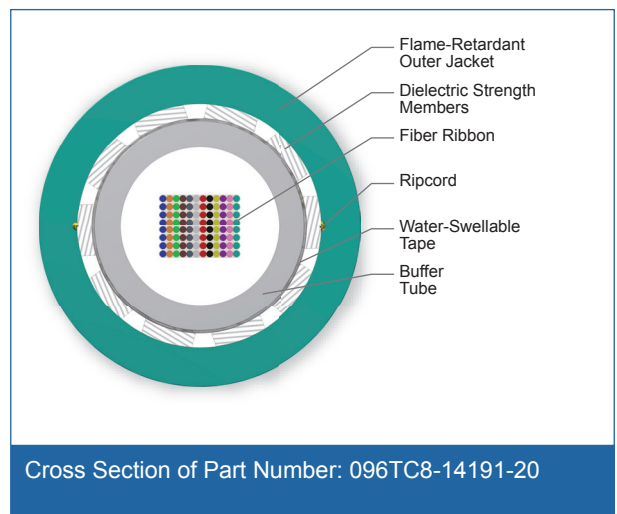
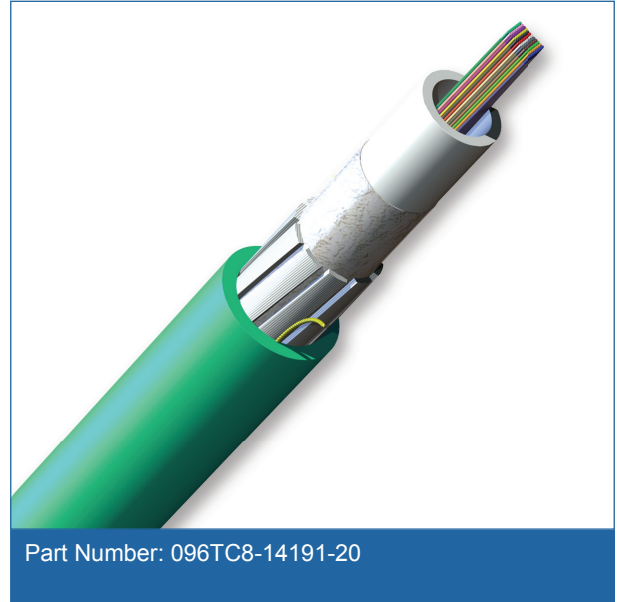
Rugged and durable

### Available with interlocking armor

Additional mechanical durability

### Common installations

Indoor plenum, riser and general building applications



## Standards

### Listings

National Electrical Code®  
(NEC®) OFNP

### Design Criteria

CSA FT-6

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## Standards

**Test Criteria** ANSI/ICEA S-83-596,  
NFPA-262

## Specifications

### General Specifications

|                |                                                    |
|----------------|----------------------------------------------------|
| Environment    | Indoor                                             |
| Application    | General Purpose Horizontal, Vertical Riser, Plenum |
| Cable Type     | Ribbon                                             |
| Product Type   | Distribution                                       |
| Flame Rating   | Plenum (OFNP)                                      |
| 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                                         | 96                                                                               |
| Ribbons per Tube                                    | 8                                                                                |
| 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-Swellable                                                                  |
| Tensile Strength Elements and/or Armoring - Layer 1 | Dielectric strength members                                                      |
| Number of Ripcords                                  | 2                                                                                |
| 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                            | 156 kg/km (105 lb/1000 ft) |
| Nominal Outer Diameter            | 12.4 mm (0.49 in)          |
| Min. Bend Radius Installation     | 186 mm (7.3 in)            |
| Min. Bend Radius Operation        | 124 mm (4.9 in)            |

## Chemical Characteristics

|      |                                                           |
|------|-----------------------------------------------------------|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
|------|-----------------------------------------------------------|

## Fiber Specifications

### Optical Characteristics (cabled)

|                                         |                          |
|-----------------------------------------|--------------------------|
| Fiber Core Diameter                     | 50 µm                    |
| Fiber Category                          | OM4 Extended Distance    |
| Fiber Code                              | T                        |
| Performance Option Code                 | 91                       |
| 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              | 600 m / -                |
| Min. Overfilled Launch (OFL) Bandwidth  | 3500 MHz*km / 500 MHz*km |
| Minimum Effective Modal Bandwidth (EMB) | 5350 MHz*km / -          |

\* Assumes 0.7 dB maximum total connector/splice loss.

\* Meets 0.75 ns optical skew when used in all Corning Plug and Play™/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         | 096TC8-14191-20                                                               |
| Product Description | Ribbon Cable, Plenum, 96 F, 50 $\mu$ m multimode, extended 10G distance (OM4) |



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