48 F, 50 µm multimode (OM2)

#### CORNING

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

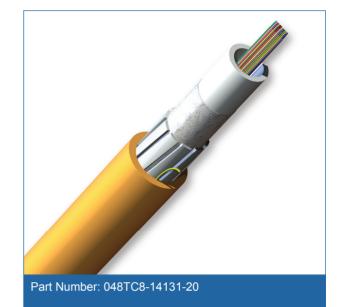
Available with interlocking armor Additional mechanical durability

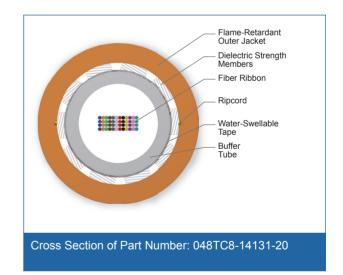
**Common installations** Indoor plenum, riser and general building applications

#### 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 (OM2)                                     |

| 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                                         | 48                                                                               |
| Ribbons per Tube                                    | 4                                                                                |
| 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)                                                                 |
| Таре                                                | 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                                  | Orange                                                                           |



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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)           |
| Nominal Outer Diameter            | 9.7 mm (0.38 in)         |
| Min. Bend Radius Installation     | 146 mm (5.7 in)          |
| Min. Bend Radius Operation        | 97 mm (3.8 in)           |
| Weight                            | 99 kg/km (66 lb/1000 ft) |

| 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                          | OM2                     |
| Fiber Code                              | Т                       |
| Performance Option Code                 | 31                      |
| Wavelengths                             | 850 nm / 1300 nm        |
| Maximum Attenuation                     | 3.0 dB/km / 1.0 dB/km   |
| Serial 1 Gigabit Ethernet               | 750 m / 500 m           |
| Serial 10 Gigabit Ethernet              | 150 m / -               |
| Min. Overfilled Launch (OFL) Bandwidth  | 700 MHz*km / 500 MHz*km |
| Minimum Effective Modal Bandwidth (EMB) | 950 MHz*km / -          |

Notes: 1) 50  $\mu$ m multimode fiber macrobend loss  $\leq$  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.

Contact a Corning Customer Care Representative for additional information.

### Ordering Information

| Part Number         | 048TC8-14131-20                                   |
|---------------------|---------------------------------------------------|
| Product Description | Ribbon Cable, Plenum, 48 F, 50 µm multimode (OM2) |
| EAN Code            | 4056418177700                                     |



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Notes



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