# Ruggedized Ribbon Cable, Plenum

## 48 F, Single-mode (OS2)

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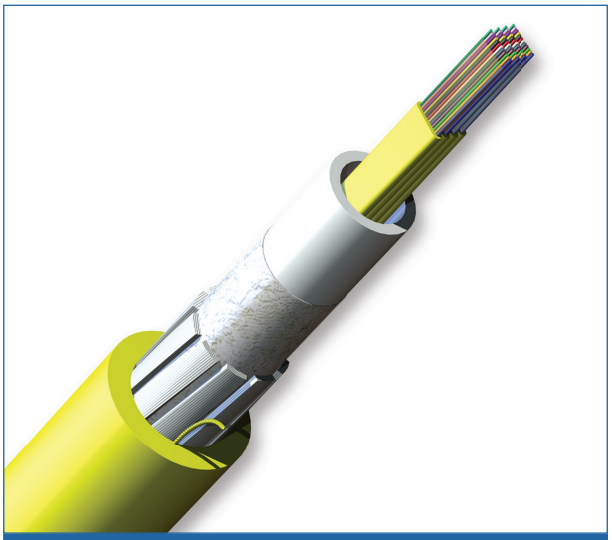
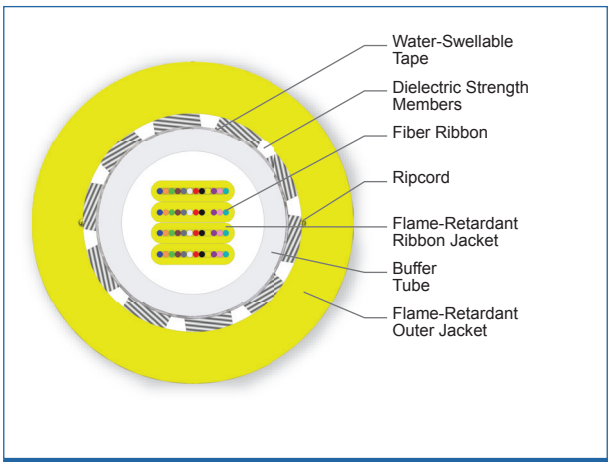
Corning ruggedized ribbon plenum cables are designed for intrabuilding backbones in plenum, riser and general-purpose installation. With a flame-retardant outer jacket that meets the requirements of the National Electrical Code® (NEC®), Article 770-51(A) and NFPA 262 flame tests, the cables are also ideal for data centers and segregating secure traffic on protected distribution systems (PDS). The cables consist of fibers organized into easily identifiable 12-fiber ruggedized ribbons inside a central tube with readily identifiable ribbon ID numbers and fiber colors which allow easy access of individual fibers. Dielectric strength members provide tensile strength. These cables are compatible with standard ribbon cable procedures and hardware.

*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.*



Part Number: 048EC8-94101-20




Cross Section of Part Number: 048EC8-94101-20

## Features and Benefits

**Precise fiber and ribbon geometries**
Excellent mass splicing yields

**Ribbon ID numbers and fiber colors**
Easily identifiable

**Dielectric strength members**
Additional mechanical durability

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

## Standards

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



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## Specifications

| General Specifications | |
|---|---|
| Environment | Indoor |
| Application | General Purpose Horizontal, Vertical Riser, Plenum |
| Cable Type | Ribbon |
| Product Type | Distribution |
| Flame Rating | Plenum (OFNP) |
| Fiber Category | Single-mode (OS2) |

| 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 |
| Ribbon jacket material | Flame-retardant |
| Ribbon jacket color | Yellow |
| 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 | Yellow |

| Mechanical Characteristics Cable | |
|---|---|
| Max. Tensile Strength, Short-Term | 1320 N (300 lbf) |
| Max. Tensile Strength, Long-Term | 400 N (90 lbf) |
| Weight | 195 kg/km (131 lb/1000 ft) |
| Nominal Outer Diameter | 13.6 mm (0.5 in) |



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| Mechanical Characteristics Cable | |
|---|---|
| Min. Bend Radius Installation | 204 mm (8 in) |
| Min. Bend Radius Operation | 136 mm (5.4 in) |

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

## Fiber Specifications

| Optical Characteristics (cabled) | |
|---|---|
| Fiber Name | Single-mode (OS2) |
| Fiber Category | G.652.D |
| Fiber Code | E |
| Performance Option Code | 01 |
| Wavelengths | 1310 nm / 1383 nm / 1550 nm |
| Maximum Attenuation | 0.4 dB/km / 0.4 dB/km / 0.3 dB/km |

## Ordering Information

| | |
|---|---|
| Part Number | 048EC8-94101-20 |
| Product Description | Ruggedized Ribbon Cable, Plenum, 48 F, Single-mode (OS2) |
| EAN Code | 4056418187815 |

RoHS COMPLIANT

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