

# Ribbon Cable, Plenum

48 F, Single-mode (OS2)

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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

### Gel-free waterblocking technology

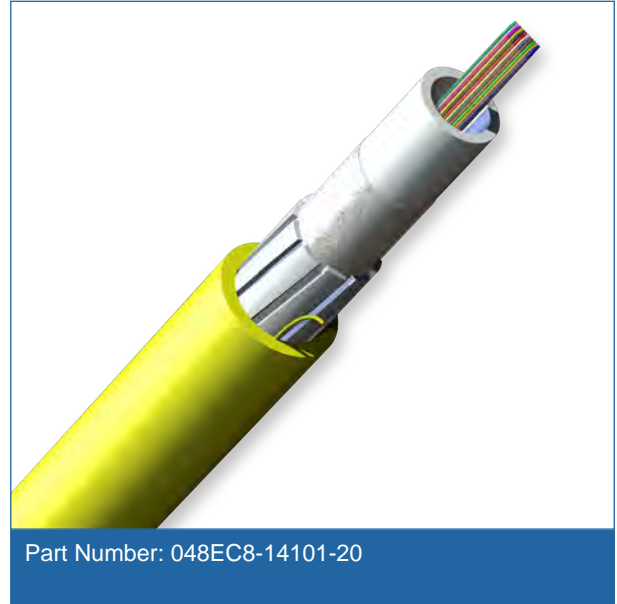
Craft-friendly cable preparation

### Innovative waterblocking technology

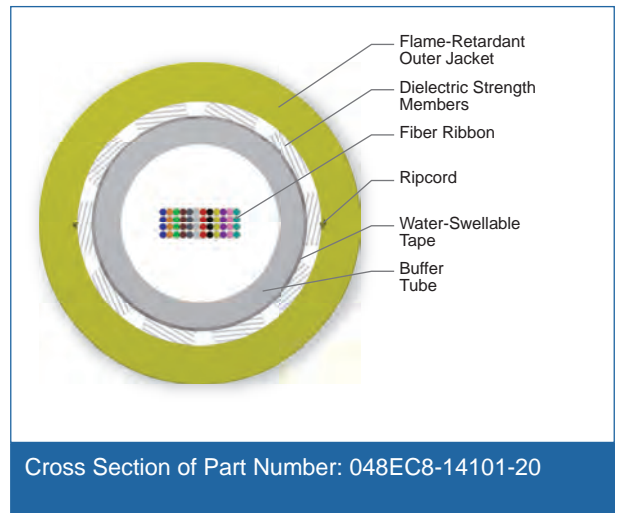
Prevents water penetration

### Flame-retardant jacket

Rugged and durable



Part Number: 048EC8-14101-20



Cross Section of Part Number: 048EC8-14101-20

## Standards

### Approval and Listings

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

### Common Installations

Indoor plenum, riser and general building applications

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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	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
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

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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 2002/95/EG
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Name	SMF-28e+® fiber
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
Typical attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

\* Typical attenuation values match the attenuation values listed in the optical fiber specifications. See [www.corning.com/opticalfiber](http://www.corning.com/opticalfiber) for Corning optical fiber specifications. Better attenuation performance options are available for some fiber and cable types. Contact Customer Care for additional fiber options.

\* \* SMF-28® Ultra and ClearCurve® XB fiber deliver up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.

## Ordering Information

Part Number	048EC8-14101-20
Product Description	Ribbon Cable, Plenum, 48 F, Single-mode (OS2)

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The Corning logo consists of a solid blue square with the word "CORNING" in white, uppercase, sans-serif font centered within it.

## *Notes*



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