144 F, 50 µm multimode, extended 10G distance (OM4+)



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

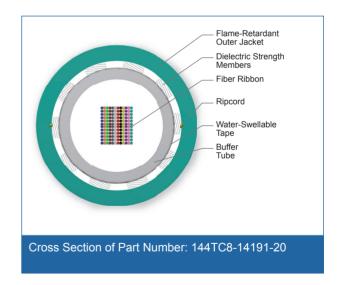
Available with interlocking armor

Additional mechanical durability

**Common installations** 

Indoor plenum, riser and general building applications

# Part Number: 144TC8-14191-20



### **Standards**

Listings National Electrical Code® (NEC®) OFNP

Design Criteria CSA FT-6

144 F, 50 µm multimode, extended 10G distance (OM4+)



### 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	144
Ribbons per Tube	12
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	11 mm (0.43 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



144 F, 50 µm multimode, extended 10G distance (OM4+)



Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)
Weight	220 kg/km (148 lb/1000 ft)
Nominal Outer Diameter	15.5 mm (0.61 in)
Min. Bend Radius Installation	233 mm (9.2 in)
Min. Bend Radius Operation	155 mm (6.1 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	Т	
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 / -	

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

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.



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

144 F, 50 µm multimode, extended 10G distance (OM4+)



# **Ordering Information**

Part Number	144TC8-14191-20
Product Description	Ribbon Cable, Plenum, 144 F, 50 $\mu m$ multimode, extended 10G distance (OM4)
EAN Code	4056418147598



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified.

© 2016 Corning Optical Communications. All rights reserved.

