Ribbon Cable, Riser

24 F, 50 µm multimode (OM4)



Corning ribbon riser cables are all-dielectric and designed for indoor use. The optical fibers are organized into easily identifiable 12-fiber ribbons inside a central tube. The required tensile strength is provided by dielectric strength elements that are helically stranded around the central tube. The specially formulated, flame-retardant outer jacket and rugged construction of these cables facilitates routing through riser shafts and long horizontal runs inside buildings. These cables are tested using the UL 1666 flame test, meet the application requirements of the National Electrical Code (NEC) and are OFNR and FT-4 listed.

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

Common installations

Indoor vertical riser and general purpose horizontal according to National Electrical Code® (NEC®) Article 770

Flame-Retardant Outer Jacket Dielectric Strength Members Fiber Ribbon Ripcord Water-Swellable Tape Buffer Tube Cross Section of Part Number: 024TC7-14190-20

Standards

Listings	National Electrical Code® (NEC®) OFNR
Design Criteria	CSA FT-4
Test Criteria	ANSI/ICEA S-83-596



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Specifications

General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser
Cable Type	Ribbon
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	50 μm MM (OM4)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °F to 158 °F)

Cable Design	
Fiber Count	24
Ribbons per Tube	2
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

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	1320 N (300 lbf)
Max. Tensile Strength, Long-Term	400 N (90 lbf)
Min. Bend Radius Installation	146 mm (5.7 in)
Min. Bend Radius Operation	97 mm (3.8 in)
Weight	98 kg/km (70.8 lb/1000 ft)
Nominal Outer Diameter	9.7 mm (0.38 in)



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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	
Fiber Code	T	
Performance Option Code	90	
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	550 m / -	
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km	
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -	

^{*} Assumes 1.0 dB maximum total connector/splice loss.

Notes: 1) 50 μ 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.
- 4) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	024TC7-14190-20
Product Description	Ribbon Cable, Riser, 24 F, 50 µm multimode (OM4)
EAN Code	4056418161075



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^{*} Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.