LSZH™ Ribbon Cable

48 F, 50 µm multimode (OM4)



Corning LSZH™ ribbon cables are designed for horizontal intrabuilding backbones where limited-smoke and zero-halogen requirements exist. These cables are organized with 12-fiber ribbons inside a central tube that are surrounded by dielectric strength members and a specially formulated flame-retardant outer jacket. The 12-fiber ribbons have readily identifiable ribbon ID numbers and fiber colors that allow for easy access to individual fibers. The precise fiber and ribbon geometries result in excellent mass splicing yields. The ribbon riser 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.



Features and Benefits

Precise fiber and ribbon geometries

Excellent mass splicing yields

Ribbon ID numbers and fiber colors Easily identifiable

Available with interlocking armor Additional mechanical durability

Common installations

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

Dielectric Strength Members Buffer Tube Fiber Ribbon Ripcord Water-Swellable Tape Flame-Retardant Outer Jacket Cross Section of Part Number: 048TCJ-14190-20

Standards

Listings National Electrical Code®

(NEC®) OFN-LS, IEEE 383

flame test, UL-1685

Design and Test Criteria ANSI/ICEA S-83-596; CSA

FT-4-ST1

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Specifications

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

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 60 °C (-22 °F to 140 °F)
Operation	-40 °C to 70 °C (-40 °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	5.80 mm (0.23 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)
Weight	94.8 kg/km (63.7 lb/1000 ft)
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)



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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	048TCJ-14190-20
Product Description	LSZH™ Ribbon Cable, 48 F, 50 µm multimode (OM4)



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