LSZH™ Ribbon Cable

144 F, 50 µm multimode, extended 10G distance (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: 144TCJ-14191-20

Standards

Listings National Electrical Code®

(NEC®) OFN-LS, IEEE 383 flame test, UL-1685

Design Criteria CSA FT-4-ST1

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	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	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)
Таре	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	193.8 kg/km (130 lb/1000 ft)
Nominal Outer Diameter	15.2 mm (0.60 in)
Min. Bend Radius Installation	228 mm (9.0 in)
Min. Bend Radius Operation	152 mm (6.0 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 Extended Distance	
Fiber Code	T	
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 / -	

^{*} Assumes 0.7 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.

 3.
- 4) Contact a Corning Customer Care Representative for additional information.

Ordering Information

Part Number	144TCJ-14191-20
Product Description	LSZH™ Ribbon Cable, 144 F, 50 µm multimode, extended 10G distance (OM4)



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