# LSZH™ Ribbon Cable

12 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: 012TCJ-14190-20

## **Standards**

**Test Criteria** 

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

Design Criteria CSA FT-4-ST1

ANSI/ICEA S-83-596

# **LSZH™** Ribbon Cable

12 F, 50 µm multimode (OM4)



# **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	12
Ribbons per Tube	1
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)
Weight	93.2 kg/km (62.5 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)



# **LSZH™** Ribbon Cable

12 F, 50 µm multimode (OM4)



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 / -	

<sup>\*</sup> Assumes 1.0 dB maximum total connector/splice loss.

Notes: 1) 50  $\mu$ 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	012TCJ-14190-20
Product Description	LSZH™ Ribbon Cable, 12 F, 50 µm multimode (OM4)
EAN Code	4056418141398



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.



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