

LSZH™ Loose Tube, Gel-Free, Single-Jacket Cable 48 F, 50 μm multimode (OM3)



Part Number:
048TUZ-T4180D20

Corning LSZH™ loose tube gel-free cables are flame-retardant, indoor/outdoor, suitable for installation in interbuilding and intrabuilding applications. The loose tube design offers mechanical ruggedness and environmental durability while the all-dielectric cable construction requires no grounding or bonding. The water-swellable yarn eliminates the need for gel-filling compound and allows more efficient and craft-friendly cable preparation. The 250 μm color-coded fibers allow quick and easy identification during installation. Corning LSZH cables eliminate risks in the event of a fire as the LSZH compound does not drip when superheated. The material burns to ash, eliminating the onset of secondary fires. When cables containing halogens ignite, they emit highly reactive gases that can be harmful if inhaled. When halogens combine with water, acids are formed. These acids damage both living tissue and inorganic materials, such as metal and electronic equipment. The flexible, flame-retardant outer jacket is UV-resistant and enables direct exposure to sunlight. Interlocking armor is available for special applications requiring additional mechanical durability.

Features and Benefits

Low-smoke, zero-halogen sheath

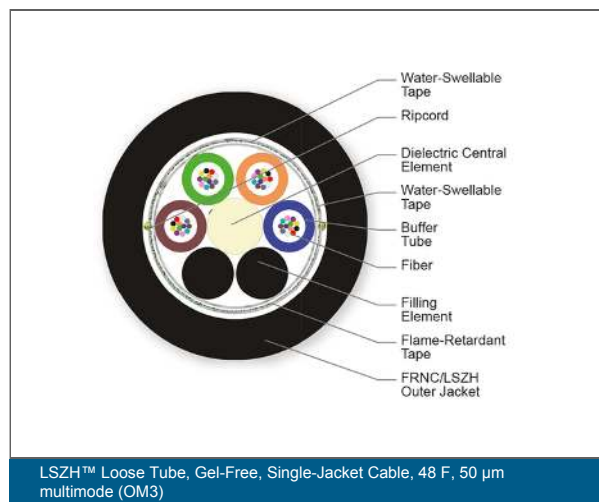
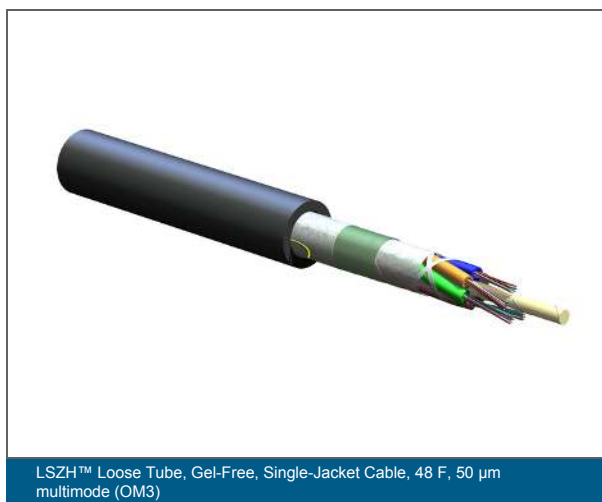
Key life-safety benefit

Meets cyclic impact and chemical resistance test

Superior performance

Common installations

Outdoor aerial and duct



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Specifications

General Specifications	
Environment	Indoor/Outdoor
Cable Type	Loose Tube
Product Type	Dielectric
Fiber Category	50 µm MM (OM3)
Flame Rating	LSZH (OFN-LS)
Application	Aerial, Direct Buried, Duct, General Purpose Horizontal
Fiber Count	48

Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Approvals and Listings	National Electrical Code® (NEC®) OFCR-LS/Riser, Sunlight Resistant (SUN RES), IEEE-1202 flame test, Suitable for Direct Burial (DIR BUR), IEC 60332-3, IEC 60754-2, IEC 61034
Common Installations	Outdoor aerial and duct; indoor general purpose horizontal according to NEC Article 770
Design and Test Criteria	ANSI/ICEA S-104-696, UL 13, UL 444, UL 1277, UL 1685, CSA C22.2, No. 230 and No. 232, CSA OFC (FT-4-S1)

Environmental Conditions	
Temperature Range, Installation	-30 °C to 60 °C (-22 °F to 140 °F)
Temperature Range, Operation	-40 °C to 70 °C (-40 °F to 158 °F)
Temperature Range, Storage	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	48
Number of Ripcords	2

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Cable Design	
Outer Jacket Color	Black
Outer Jacket Material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Buffer Tube Color	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Active Tubes	4
Number of Filling Elements	2
Number of Tube Positions	6
Tape	Water-swellable
Tape, Layer 2	Flame-retardant tape
Tape, Layer 3	Water-swellable
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Color Code Standards	Telcordia

Mechanical Specifications	
Max. Tensile Strength, Long-Term	810 N (182.1 lbf)
Max. Tensile Strength, Short-Term	2700 N (606.98 lbf)
Min. Bend Radius Installation	192 mm (7.56 in)
Min. Bend Radius Operation	128 mm (5.04 in)
Nominal Outer Diameter	12.8 mm (0.5 in)

Optical Characteristics	
Fiber Code	T
Fiber Type	Multimode
Performance Option Code	80
Fiber Core Diameter	50 μm

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Optical Characteristics	
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Serial 1 Gigabit Ethernet	1000 MHz*km / 600 MHz*km
Serial 10 Gigabit Ethernet	300 MHz*km / -
Wavelengths	850 nm / 1300 nm
Fiber Category	OM3

Dimensions	
Cable Weight	152 kg/km (102.14 lb/1000 ft)



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