Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free, Corrugated Armored Cable 12 F, Single-mode (OS2)
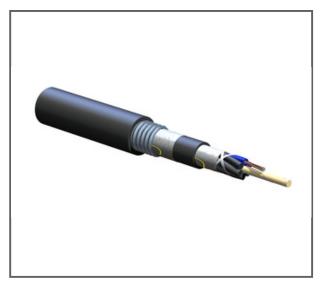
CORNING

Part Number:
012EUV-T4101D2N

Corning Industrial LSZH™ fiber optic cables are designed for industrial building backbones and harsh environments atypical of traditional datacom systems. Based on proven stranded loose tube cable designs, these industrial cables are flame-retardant and have been tested to meet mechanical/environmental conditions exceeding the requirements set for traditional datacom cables. The 250 µm color-coded individual fibers offer quick and easy identification during installation.

Corning Industrial LSZH™ cables provide life-safety benefits for industrial applications through the cables' construction. Many traditional data communication cables contain halogens in the jacket compound, which pose little risk in the controlled and protected environment of typical building air spaces, such as behind walls, under floors and in conduit. However, cables deployed in industrial applications, particularly on the plant floor, are typically exposed to greater risk of fire, extreme temperatures or chemical exposure. This often makes halogen cables inappropriate for industrial environments.

Features and Benefits

Low-smoke, zero-halogen sheath
Key life-safety benefit

Meets cyclic impact and chemical resistance test
Superior performance

Corrugated armor
Mechanical protection

Common installations
Outdoor aerial and duct; indoor riser and general purpose horizontal according to NEC Article 770

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Specifications

Mechanical Specifications	
Max. Tensile Strength, Long-Term	810 N
Max. Tensile Strength, Short-Term	2700 N
Min. Bend Radius Installation	222 mm (8.74 in)
Min. Bend Radius Operation	148 mm (5.83 in)
Nominal Outer Diameter	14.8 mm (0.58 in)

Cable Design	
Central Element	Dielectric
Fiber Count	12
Buffer Tube Color Coding	Blue
Number of Ripcords	3
Outer Jacket Color	Black
Outer Jacket Material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Buffer Tube Color	Blue
Buffer Tube Diameter	2.5 mm (0.1 in)
Inner Jacket Material	Flame-retardant, non-corrosive/low-smoke, zero-halogen (FRNC/LSZH) material
Number of Active Tubes	1
Number of Filling Elements	5
Number of Tube Positions	6

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Cable Design

Tape	Water-swellable
Tape, Layer 2	Flame-retardant tape
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12

Environmental Conditions

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

General Specifications

Environment	Indoor/Outdoor
Cable Type	Loose Tube
Product Type	Corrugated Steel Armor
Fiber Category	Single-mode (OS2)
Flame Rating	LSZH™ (OFCR-LS)
Application	Aerial , Direct Buried , Duct , Tray-Rated

Ordering Information

Weight	238 kg/km

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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
Design and Test Criteria	ANSI/ICEA S-104-696, UL 13, UL 444, UL 1277, UL 1666, CSA C22.2 No. 230 and No. 232, CSA OFC (FT-4-S1)

Optical Characteristics

Fiber Code	E
Fiber Name	Single-mode (OS2)
Fiber Type	Single-mode
Performance Option Code	01
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Category	G.652.D

RoHS
COMPLIANT

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