Industrial LSZH™ Loose Tube, Gel-Free, Double-Jacket Cable

12 F, 62.5 µm multimode (OM1)

CORNING

Corning Cable Systems 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 tray-rated industrial cables are flame-retardant and have been tested to meet mechanical/environmental conditions exceeding the requirements set for traditional datacom cables. They have also demonstrated superior performance levels when tested to specified "tray" application requirements for compressive loading, cyclic impact and chemical resistance. The 250 µm color-coded individual fibers offer quick and easy identification during installation.

Corning Cable Systems 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.

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. Corning Cable Systems Industrial LSZH Cables eliminate these risks in the event of a fire in the industrial environment. In addition, the LSZH compound does not drip when superheated; the material burns to ash, eliminating the onset of secondary fires.

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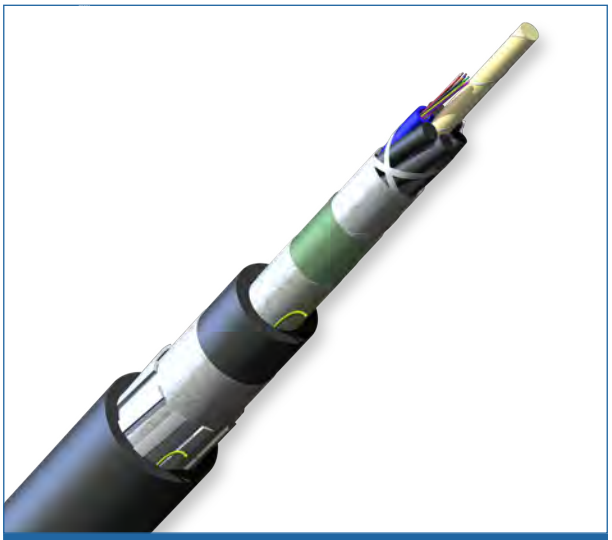
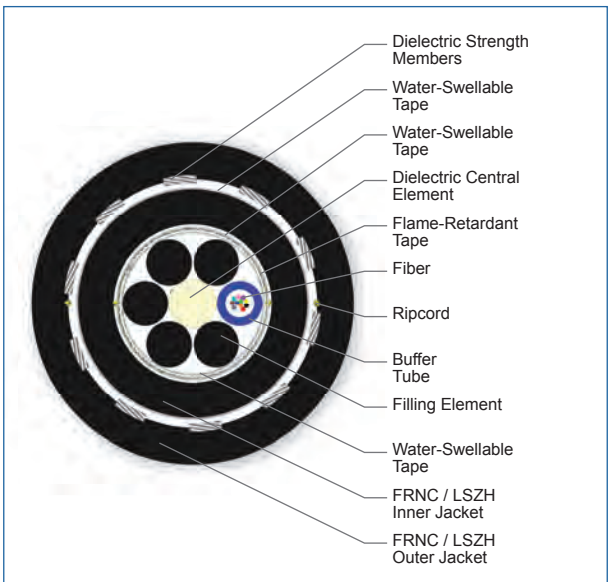
This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



Part Number: 012KUL-T4630D2N



Cross Section of Part Number: 012KUL-T4630D2N

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Features and Benefits

Double-jacket, gel-free
Cold temperature environments

Low-smoke/zero-halogen (LSZH™) sheath
Key life-safety benefit

Meets cyclic impact and chemical resistance test
Superior performance

Tray-rated per UL 13; UL 444; UL 1277; UL 1685; CSA C22.2 No. 230 and No. 232
Tested to industrial ruggedness standards

Listed OFN-LS and CSA FT4-ST1, IEC 60332-3, IEC 61034 and IEC 60754-2
Meets burn test criteria

Standards

Approval and Listings	National Electrical Code® (NEC®) OFN-LS; OFN FT4-ST1; Sunlight Resistant (SUN RES); IEEE-383 flame test; Suitable for Direct Buried (DIR BUR); IEC 60332-3, IEC 60754-2, IEC 61034
Common Installations	Outdoor lashed aerial and duct; indoor general purpose horizontal according to National Electrical Code® (NEC®) Article 770
Design and Test Criteria	ANSI/ICEA S-104-696; UL 13; US 444: UL 1685; UL 1277; CSA C22.2, No. 230 and No. 232

Specifications

General Specifications	
Environment	Indoor/Outdoor Cables
Application	Aerial, Direct Buried, Duct, Tray Rated, (General Purpose Horizontal)
Cable Type	Loose Tube
Product Type	Dielectric

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Specifications

General Specifications	
Flame Rating	LSZH™ (OFN-LS)
Fiber Category	62.5 µm MM (OM1)

Temperature Range	
Storage	-50 °C to 75 °C (-58 °F to 167 °F)
Installation	-30 °C to 60 °C (-22 °F to 140 °F)
Operation	-50 °C to 75 °C (-58 °F to 167 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	1
Buffer Tube Color Coding	Blue
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	5
Tape	Water-swellable
Tape, Layer 2	Flame-retardant tape
Tape, Layer 3	Water-swellable
Inner Jacket Material	Flame-retardant, non-corrosive / low-smoke, zero-halogen (FRNC / LSZH) material
Tape, Layer 4	Water-swellable
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Number of Ripcords	4
Outer Jacket Material	Flame-retardant, non-corrosive / low-smoke, zero-halogen (FRNC / LSZH) material
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	4500 N (1000 lbf)
Max. Tensile Strengths, Long-Term	1500 N (333 lbf)

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Mechanical Characteristics Cable	
Weight	299 kg/km (201 lb/1000 ft)
Nominal Outer Diameter	17.6 mm (0.69 in)
Min. Bend Radius Installation	264 mm (10.4 in)
Min. Bend Radius Operation	176 mm (6.9 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/EG

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Type	Multimode
Fiber Core Diameter	62.5 µm
Fiber Category	OM1
Fiber Code	K
Performance Option Code	30
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -
Serial 1 Gigabit Ethernet	300 m / 550 m
Serial 10 Gigabit Ethernet	33 m / -

Notes: 1) Improved attenuation and bandwidth options available.
2) Bend-insensitive single-mode fibers available on request.
3) *Contact a Corning Cable Systems Customer Care Representative for additional information.*

Ordering Information

Part Number	012KUL-T4630D2N
Product Description	Industrial LSZH™ Loose Tube, Gel-Free, Double-Jacket Cable, 12 F, 62.5 µm multimode (OM1)

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Notes

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