

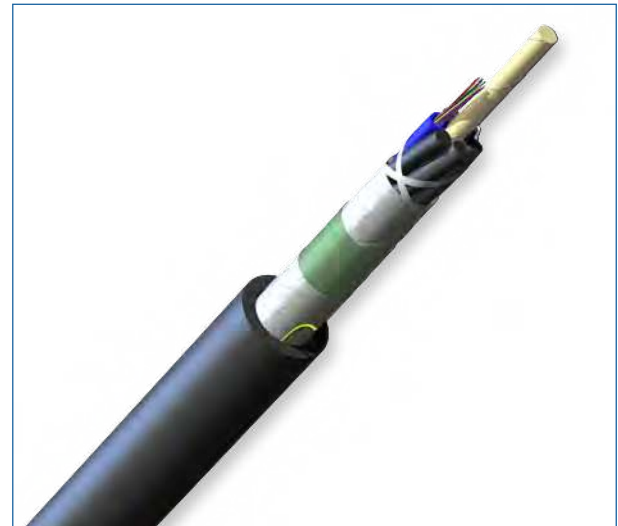
Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free Cable

12 F, 50 μm multimode (OM3)

CORNING

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 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.

Note: 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 while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



Part Number: 012TUZ-T4180D2N

Features and Benefits

Low-smoke, zero-halogen 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

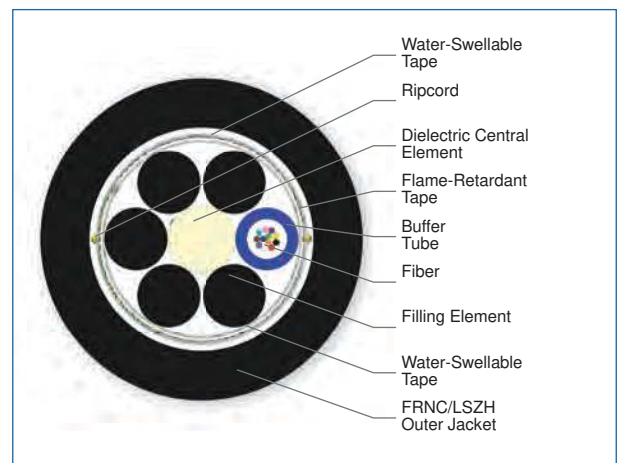
Listed OFN-LS and CSA FT4-ST1, IEC 60332-3, IEC 61034 and IEC 60754-2

Meets burn test criteria

Standards

Approval and Listings

National Electrical Code® (NEC®) OFN-LS; OFN FT4-ST1; Sunlight Resistant (SUN RES); IEEE-383/IEEE-1202 flame test; Suitable for Direct Buried (DIR BUR); IEC 60332-3, IEC 60754-2, IEC 61034



Cross Section of Part Number: 012TUZ-T4180D2N

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Standards

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
Flame Rating	LSZH™ (OFN-LS)
Fiber Category	50 µm MM (OM3)

Temperature Range	
Storage	-40 °C to 75 °C (-40 °F to 167 °F)
Installation	-30 °C to 60 °C (-22 °F to 140 °F)
Operation	-40 °C to 75 °C (-40 °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)

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Cable Design

Number of Filling Elements	5
Tape	Water-swellable
Tape, Layer 2	Flame-retardant tape
Tape, Layer 3	Water-swellable
Number of Ripcords	2
Outer Jacket Material	Flame-retardant, non-corrosive / low-smoke, zero-halogen (FRNC / LSZH) material
Outer Jacket Color	Black

Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	810 N (180 lbf)
Weight	140 kg/km (94 lb/1000 ft)
Nominal Outer Diameter	12.5 mm (0.49 in)
Min. Bend Radius Installation	188 mm (7.4 in)
Min. Bend Radius Operation	125 mm (4.9 in)

Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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Fiber Specifications

Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM3
Fiber Code	T
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m

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

- Notes:
- 1) 50 µm multimode fiber macrobend loss ≤ 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.

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Fiber Specifications

Optical Characteristics (cabled)	
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

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

- Notes:
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Ordering Information

Part Number	012TUZ-T4180D2N
Product Description	Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free Cable, 12 F, 50 µm multimode (OM3)



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

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