

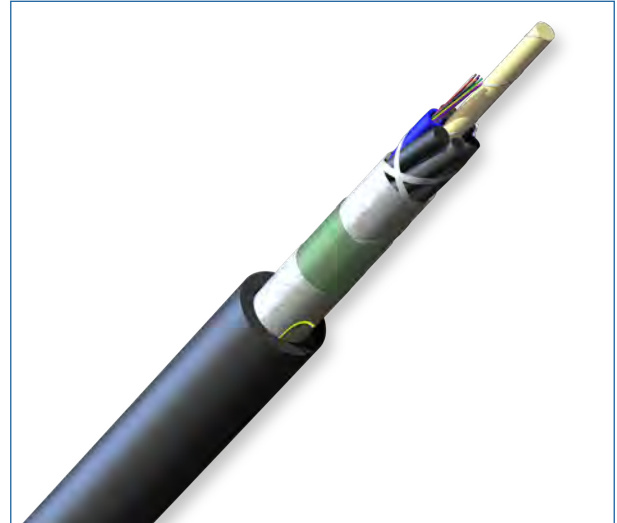
Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free Cable

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

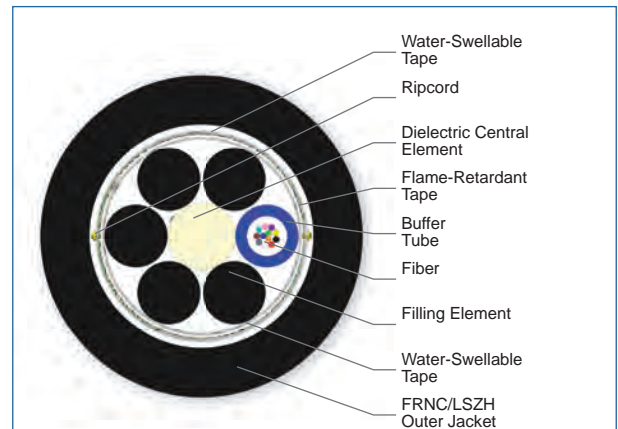
Superior performance

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



Cross Section of Part Number: 012TUZ-T4180D2N

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

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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 |
|------|---|

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: 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.
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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) |



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