

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

216 F, SMF-28® Ultra fiber, Single-mode (OS2)

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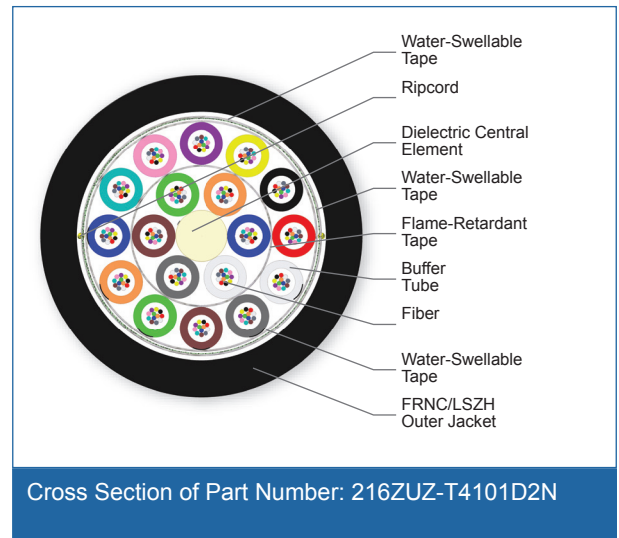
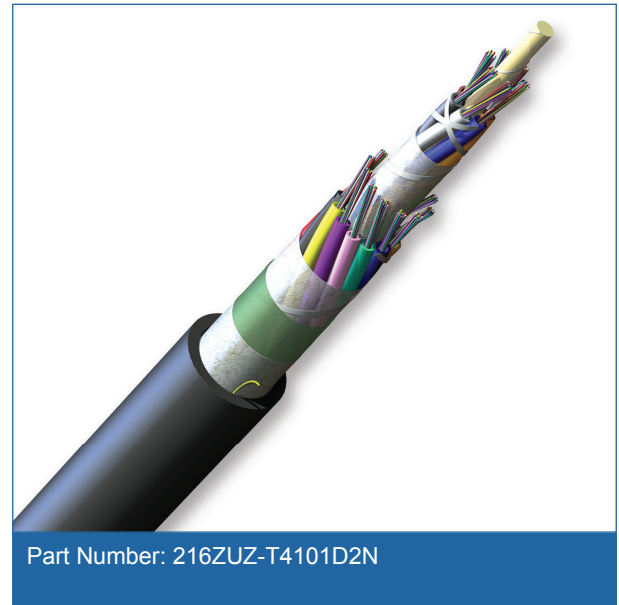
Corning Industrial LSZH™ fiber optic cables are designed for industrial building backbones and harsh environments atypical of traditional datacom systems. Based on proven stranded loose tube cable designs, these industrial cables are flame-retardant and have been tested to meet mechanical/environmental 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.

Corning 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.

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 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.

*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.*



## Features and Benefits

### Low-smoke, zero-halogen sheath

Key life-safety benefit

### Meets cyclic impact and chemical resistance test

Superior performance

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## Features and Benefits

### Common installations

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

## Standards

### Listings

National Electrical Code® (NEC®) OFN-LS, Sunlight Resistant (SUN RES); IEEE-383/IEEE-1202 flame test; Suitable for Direct Burial (DIR BUR); IEC 60332-3, IEC 60754-2, IEC 61034; MSHA 30 CFR Part 7-K, Section 7.408

### 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)

## Specifications

General Specifications	
Environment	Indoor/Outdoor
Application	Aerial, Direct Buried, Duct, Tray Rated, (General Purpose Horizontal)
Cable Type	Loose Tube
Product Type	Dielectric
Flame Rating	LSZH™ (OFN-LS)
Fiber Category	SMF-28® Ultra fiber

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

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## Cable Design

Central Element	Dielectric
Fiber Count	216
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	18
Number of Active Tubes	18
Buffer Tube Color Coding, Layer 1	Blue, Orange, Green, Brown, Slate, White
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellable
Buffer Tube Color Coding, Layer 2	Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*
Tape, Layer 2	Water-swellable
Tape, Layer 3	Flame-retardant tape
Tape, Layer 4	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	287 kg/km (193 lb/1000 ft)
Nominal Outer Diameter	18.6 mm (0.73 in)
Min. Bend Radius Installation	279 mm (11.0 in)
Min. Bend Radius Operation	186 mm (7.3 in)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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## Fiber Specifications

Optical Characteristics (cabled)	
Fiber Name	SMF-28® Ultra fiber
Fiber Category	G.657.A1
Fiber Code	Z
Performance Option Code	01
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Typical Attenuation	0.33 dB/km / 0.33 dB/km / 0.19 dB/km

\* For more information on typical attenuation please see the Corning whitepaper at [http://csmedia.corning.com/opcomm//Resource\\_Documents/whitepapers\\_r/ LAN-1863-AEN.pdf](http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_r/ LAN-1863-AEN.pdf)

## Ordering Information

Part Number	216ZUZ-T4101D2N
Product Description	Industrial LSZH™ Tray-Rated, Loose Tube, Gel-Free Cable, 216 F, SMF-28® Ultra fiber, Single-mode (OS2)



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