

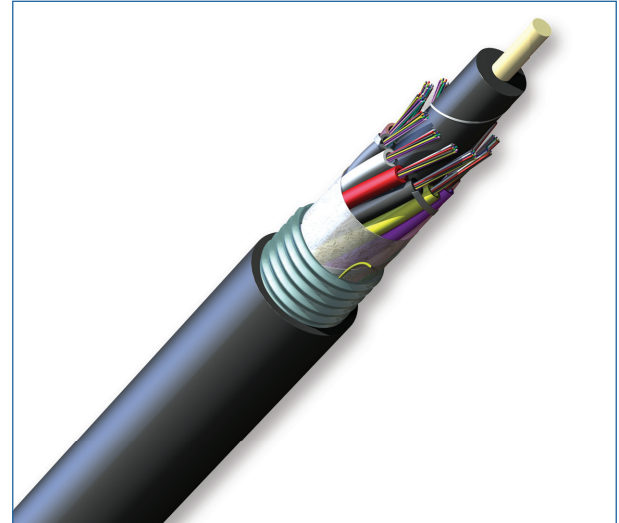
# ALTOS® Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable

144 F, 50 µm multimode (OM4)

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Corning ALTOS® Lite™ gel-free, single-jacket, single-armored cables are designed for campus backbones in direct-buried installations. The loose tube design provides stable and highly reliable transmission parameters for a variety of voice, data, video and imaging applications. These cables also provide high-fiber density within a given cable diameter while allowing flexibility to suit many system configurations.

The single armored construction provides additional crush and rodent protection with a high-strength ripcord under the armor for easy stripping. Gel-free means the cables are fully waterblocked using craft-friendly, water-swellable materials which make cable access simple and require no clean up. The flexible, craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy mid-span access. These cables have a medium density polyethylene jacket that is rugged, durable and easy to strip.



Part Number: 144TUC-T4190D20

## Features and Benefits

### Gel-free waterblocking technology

Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### Corrugated steel tape armor

Provides rodent resistance for direct-buried applications

## Standards

### Common Installations

Outdoor lashed aerial, duct and direct-buried; indoor when installed according to National Electrical Code® (NEC®) Article 770

### Design and Test Criteria

ANSI/ICEA S-87-640



Cross Section of Part Number: 144TUC-T4190D20

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## Specifications

### General Specifications

Environment	Outdoor
Application	Aerial, Direct Buried, Duct
Cable Type	Loose Tube
Product Type	Armored
Fiber Category	50 µm MM (OM4)

### Temperature Range

Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

### Cable Design

Central Element	Dielectric
Fiber Count	144
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	12
Number of Active Tubes	12
Buffer Tube Color Coding	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellaable
Number of Ripcords	2
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Maximum Fibers per Tube	12

### Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	245 kg/km (164 lb/1000 ft)

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## Mechanical Characteristics Cable

Nominal Outer Diameter	17.5 mm (0.69 in)
Min. Bend Radius Installation	263 mm (10.4 in)
Min. Bend Radius Operation	175 mm (6.9 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	OM4
Fiber Code	T
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

\* Assumes 1.0 dB maximum total connector/splice loss.

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

Notes: 1) 50 µm multimode fiber macrobend loss  $\leq 0.2$  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.

## Ordering Information

Part Number	144TUC-T4190D20
Product Description	ALTOS® Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable, 144 F, 50 µm multimode (OM4)
EAN Code	4056418171098

# ALTOS® Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable

144 F, 50 µm multimode (OM4)

The Corning logo is a blue square with the word "CORNING" in white, serif, uppercase letters centered within it.

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## Notes



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