

# ALTOS® Lite™ Low-Temperature, Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable

12 F, 50 µm multimode (OM2)

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Corning ALTOS® low-temperature cables are designed for extreme cold temperature environments with an extended operating range of -50° to +70°C (-58° to +158°F). Dielectric and armored jackets allow for duct, direct-buried or aerial (lashed) installation.

## Features and Benefits

**Extended operating temperature range of -50° to +70°C (-58° to +158°F)**

Allows for operation at extreme low temperatures

**Flexible, craft-friendly buffer tubes**

Facilitate easy routing in closures

**Innovative waterblocking design**

Provides efficient and craft-friendly cable preparation

**SZ-stranded, loose tube design**

Isolates fibers from installation and environmental rigors and facilitates mid-span access

**Dielectric central strength member**

No preferential bend and requires no bonding or grounding

**Medium-density polyethylene jacket**

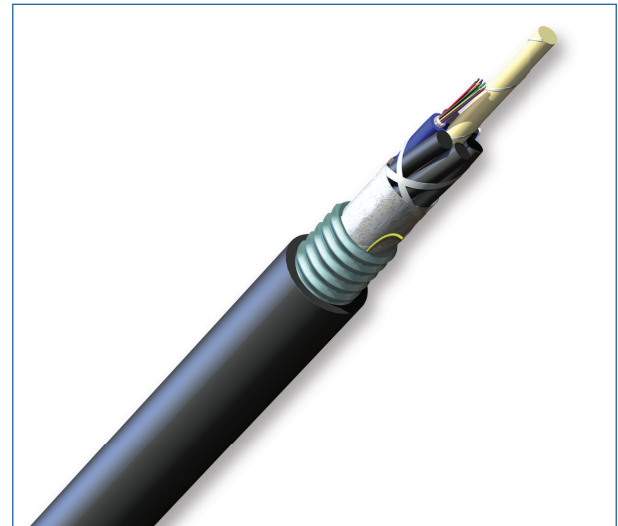
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

## Standards

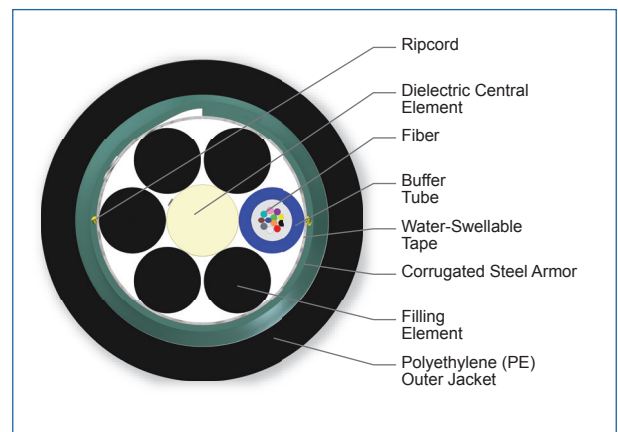
**Approvals and Listings** USDA Rural Development Programs

**Common Installations** Designed for Direct-Buried and Aerial Applications

**Design and Test Criteria** Telcordia GR-20, ICEA-640



Part Number: 012TUC-T4131C20



Cross Section of Part Number: 012TUC-T4131C20

## Specifications

General Specifications	
Environment	Outdoor
Application	Aerial, Direct Buried, Duct
Cable Type	Loose Tube

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## General Specifications

Product Type	Armored
Fiber Category	50 µm MM (OM2)

## Temperature Range

Storage	-50 °C to 70 °C (-58 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-50 °C to 70 °C (-58 °F to 158 °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-swellaable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 2	Water-swellaable
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Number of Ripcords	3
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

## Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	136 kg/km (91 lb/1000 ft)
Nominal Outer Diameter	12.1 mm (0.48 in)
Min. Bend Radius Installation	182 mm (7.1 in)
Min. Bend Radius Operation	121 mm (4.8 in)

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## Chemical Characteristics

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

### Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM2
Fiber Code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	750 m / 500 m
Serial 10 Gigabit Ethernet	150 m / -
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -

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.

## Ordering Information

Part Number	012TUC-T4131C20
Product Description	ALTOS® Lite™ Low-Temperature, Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable, 12 F, 50 µm multimode (OM2)
EAN Code	4056418161587



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