

# ALTOS® Low-Temperature, Loose Tube, Gel-Filled 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**

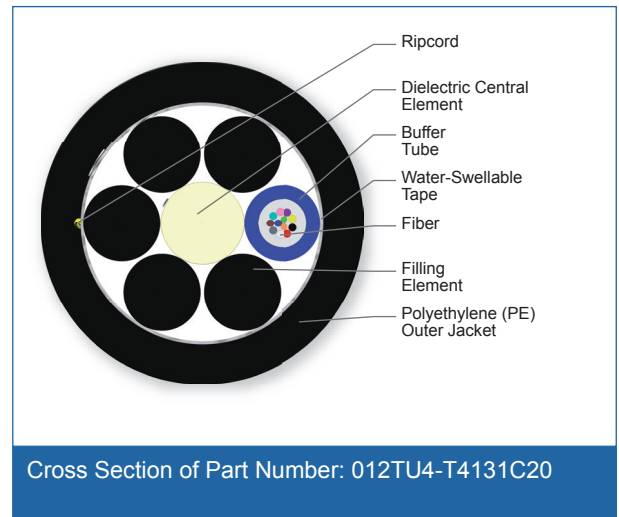
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

## Standards

**Approvals and Listings** USDA Rural Development Programs

**Common Installations** Designed for Duct and Aerial Applications

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



## Specifications

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

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## General Specifications

Product Type	Dielectric
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-swellable
Number of Ripcords	2
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	80 kg/km (54 lb/1000 ft)
Nominal Outer Diameter	10.5 mm (0.41 in)
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 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	012TU4-T4131C20
Product Description	ALTOS® Low-Temperature, Loose Tube, Gel-Filled Cable, 12 F, 50 µm multimode (OM2)
EAN Code	4056418161655



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](http://www.corning.com/opcomm)

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