

# ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

48 F, 50 µm multimode (OM2)

CORNING

Corning ALTOS® gel-free, low-temperature cables are designed for extreme cold temperature environments with an extended operating range of -50° to +70°C (-58° to +158°F). 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

**Gel-free waterblocking technology**

Craft-friendly cable preparation

**Dielectric central strength member**

No preferential bend and requires no bonding or grounding

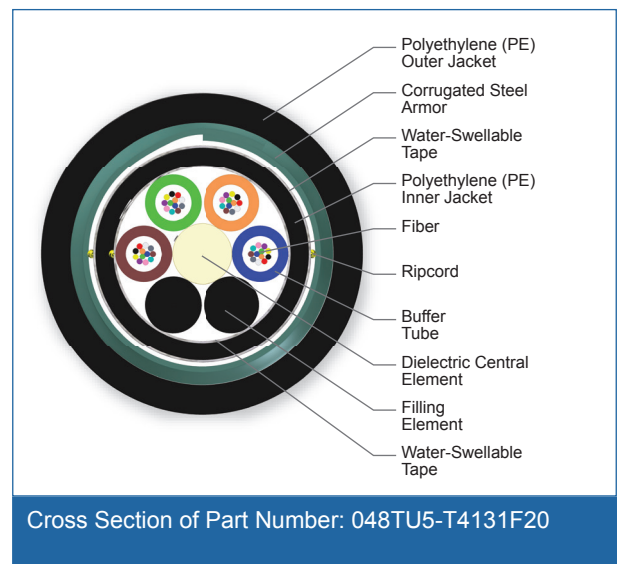
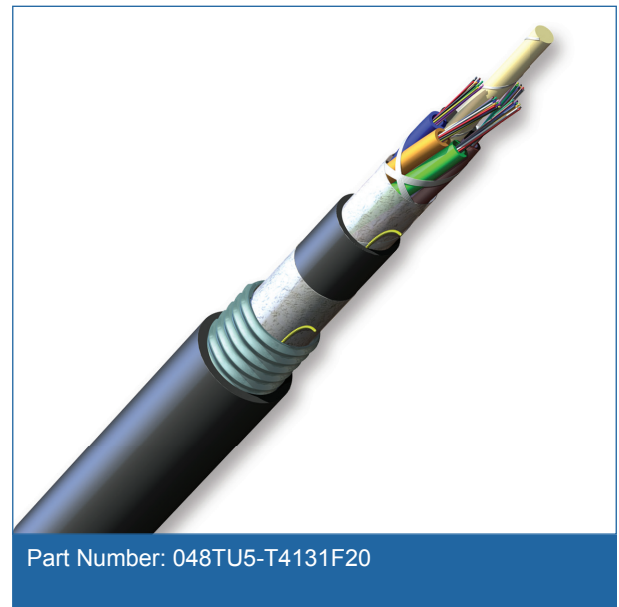
**Medium-density polyethylene jacket**

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

**Design and Test Criteria**     ANSI/ICEA S-87-640



# ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

48 F, 50 µm multimode (OM2)

CORNING

## Specifications

### General Specifications

Environment	Outdoor
Application	Aerial, Direct Buried
Cable Type	Loose Tube
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	48
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	4
Buffer Tube Color Coding	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
Tape	Water-swellable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 2	Water-swellable
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)

# ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

48 F, 50 µm multimode (OM2)

CORNING

## Mechanical Characteristics Cable

Weight	172 kg/km (115 lb/1000 ft)
Nominal Outer Diameter	14.3 mm (0.56 in)
Min. Bend Radius Installation	215 mm (8.4 in)
Min. Bend Radius Operation	143 mm (5.6 in)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
------	---

## 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  $\leq 0.2$  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	048TU5-T4131F20
Product Description	ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable, 48 F, 50 µm multimode (OM2)
EAN Code	4056418159409

CORNING

# ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

48 F, 50 µm multimode (OM2)

The CORNING logo is a blue square with the word "CORNING" in white, uppercase, sans-serif font centered inside.

## Notes



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)

A complete listing of the trademarks of Corning Optical Communications is available at [www.corning.com/opcomm/trademarks](http://www.corning.com/opcomm/trademarks).

All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified.

© 2016 Corning Optical Communications. All rights reserved.