

# ALTOS® Low-Temperature, Loose Tube, Gel-Free Cable

144 F, 50 µm multimode (OM2)

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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). Dielectric jackets allow for duct 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**

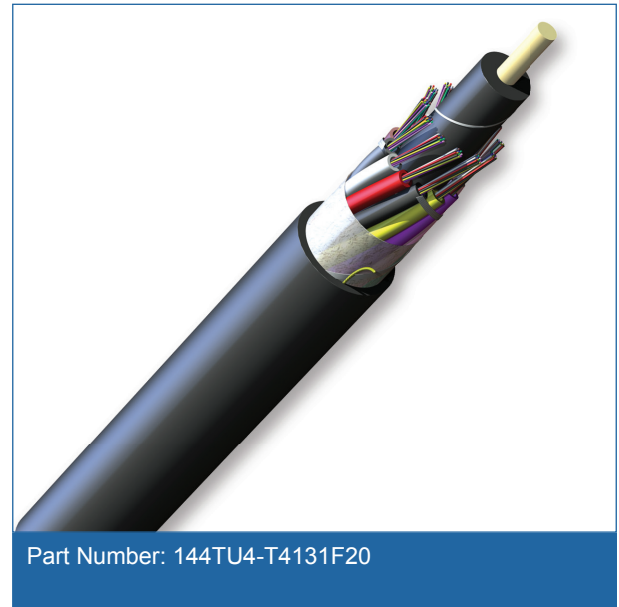
Facilitate easy routing in closures

**Gel-free waterblocking technology**

Craft-friendly cable preparation

**Medium-density polyethylene jacket**

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

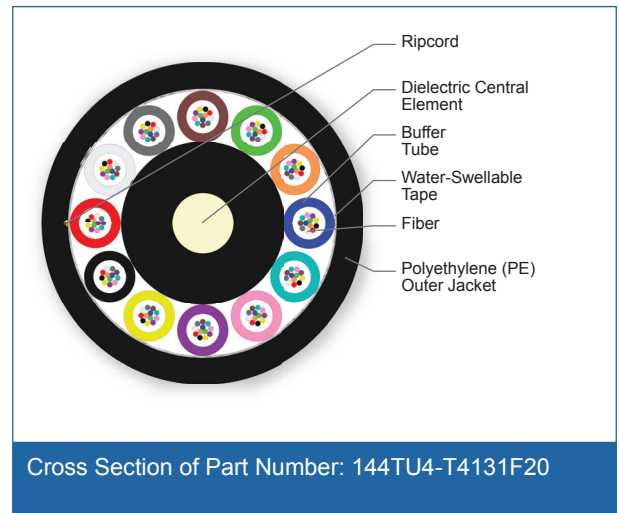


## Standards

**Approvals and Listings** USDA Rural Development Programs

**Common Installations** Outdoor duct and aerial

**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	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-swellable
Number of Ripcords	1
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	162 kg/km (109 lb/1000 ft)
Nominal Outer Diameter	15.8 mm (0.62 in)
Min. Bend Radius Installation	237 mm (9.3 in)
Min. Bend Radius Operation	158 mm (6.2 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	144TU4-T4131F20
Product Description	ALTOS® Low-Temperature, Loose Tube, Gel-Free Cable, 144 F, 50 µm multimode (OM2)
EAN Code	4056418163253



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