

# ALTOS® Loose Tube, Gel-Free Cable

48 F, 50 µm multimode (OM3)

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Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swappable materials, which means cable access is simple and no clean up is required. 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. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

## 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)

### All-dielectric construction

Requires no grounding or bonding

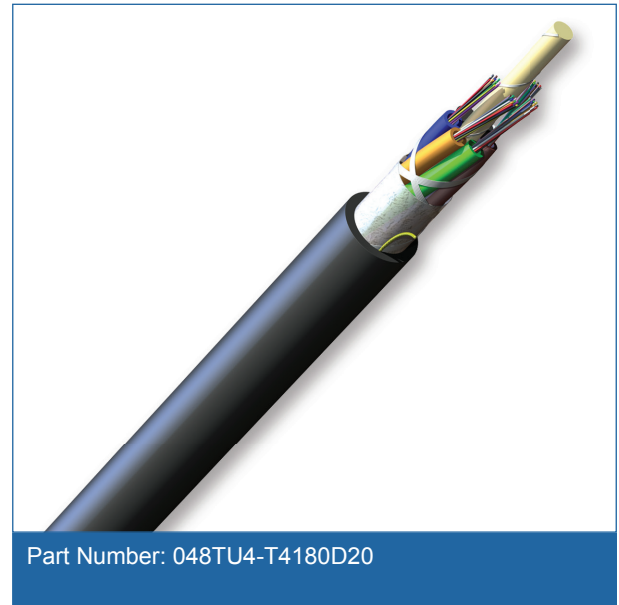
## Standards

### Common Installations

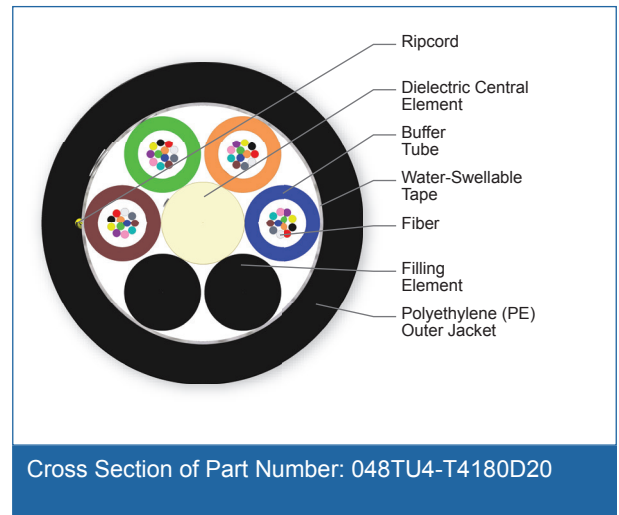
Outdoor lashed aerial and duct; indoor when installed according to National Electrical Code® (NEC®) Article 770

### Design and Test Criteria

ANSI/ICEA S-87-640



Part Number: 048TU4-T4180D20



Cross Section of Part Number: 048TU4-T4180D20

## 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 (OM3)

## 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	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
Number of Ripcords	1
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	73 kg/km (49 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 2002/95/EG
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM3
Fiber Code	T
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

\* 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 ≤ 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	048TU4-T4180D20
Product Description	ALTOS® Loose Tube, Gel-Free Cable, 48 F, 50 µm multimode (OM3)
EAN Code	4056418177335



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