48 F, 50 µm multimode (OM4)



Corning Cable Systems ALTOS® Lite™ Gel-Free, Single-Jacket, Single-Armored Cables are designed for campus backbones in direct-buried installations. The loose tube design provides stable and highly reliable transmission parameters for a variety of voice, data, video and imaging applications. These cables also provide high-fiber density within a given cable diameter while allowing flexibility to suit many system configurations.

The single armored construction provides additional crush and rodent protection with a high-strength ripcord under the armor for easy stripping. Gel-free means the cables are fully waterblocked using craft-friendly, water-swellable materials which make cable access simple and require no clean up. 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 midspan access. 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

Corrugated steel tape armor

Provides rodent resistance for direct-buried applications

Standards

Common Installations

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

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



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Specifications

General Specifications	
Environment	Outdoor
Application	Aerial, Direct Buried, Duct
Cable Type	Loose Tube
Product Type	Armored
Fiber Category	50 μm MM (OM4)

-40 °C to 70 °C (-40 °F to 158 °F)
-30 °C to 70 °C (-22 °F to 158 °F)
-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
Таре	Water-swellable
Number of Ripcords	2
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Maximum Fibers per Tube	12
Tape Number of Ripcords Tensile Strength Elements and/or Armoring - Layer 1 Outer Jacket Material Outer Jacket Color	Water-swellable 2 Corrugated steel tape armor Polyethylene (PE) Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	890 N (200 lbf)
Weight	129 kg/km (87 lb/1000 ft)



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Mechanical Characteristics Cable	
Nominal Outer Diameter	12.1 mm (0.48 in)
Min. Bend Radius Installation	182 mm (7.2 in)
Min. Bend Radius Operation	121 mm (4.8 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

Fiber Specifications

Optical Characteristics (cabled)	
Fiber Type	Multimode
Fiber Core Diameter	50 μm
Fiber Category	OM4 Extended Distance
Fiber Code	Т
Performance Option Code	91
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	5350 MHz*km / -
Serial 1 Gigabit Ethernet	1100 m / 600 m
Serial 10 Gigabit Ethernet	600 m / -

^{*} Assumes 0.7 dB maximum total connector/splice loss.

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 Cable Systems Customer Care Representative for additional information.

Ordering Information

Part Number	048TUC-T4191D20
Product Description	ALTOS [®] Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable, 48 F, 50 µm multimode (OM4)



^{*} Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

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CORNING

Notes



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