# ALTOS® Loose Tube, Gel-Free Cable

12 F, 50 µm multimode (OM4)

### CORNING

Corning Cable Systems 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-swellable 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 midspan 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

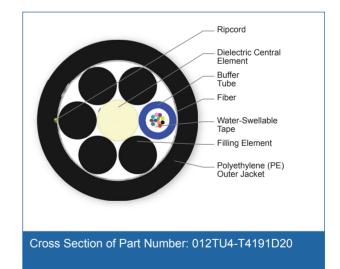
**Medium-density polyethylene jacket** Rugged, durable and easy to strip while providing superior protection against UV radiation, fungus, abrasion and other environmental factors

All-dielectric construction Requires no grounding or bonding

#### Standards

Common Installations	Outdoor lashed aerial and duct; indoor when installed according to National Electrical Code <sup>®</sup> (NEC <sup>®</sup> ) Article 770
Design and Test Criteria	ANSI/ICEA S-87-640

Part Number: 012TU4-T4191D20





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## Specifications

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

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	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
Таре	Water-swellable
Number of Ripcords	1
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	890 N (200 lbf)
Weight	73 kg/km (49 lb/1000 ft)
Nominal Outer Diameter	10.5 mm (0.41 in)

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Mechanical Characteristics Cable	
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 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.

\* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium 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 Cable Systems Customer Care Representative for additional information.

#### **Ordering Information**

Part Number	012TU4-T4191D20
Product Description	ALTOS <sup>®</sup> Loose Tube, Gel-Free Cable, 12 F, 50 µm multimode (OM4)



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**Notes** 



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