48 F, 50 µm multimode (OM4)



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

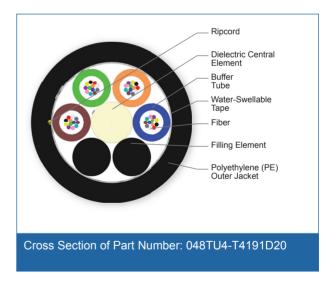
#### **Standards**

**Common Installations** 

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

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







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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	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

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 / -

<sup>\*</sup> Assumes 0.7 dB maximum total connector/splice loss.

Notes: 1) 50  $\mu$ m 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	048TU4-T4191D20
Product Description	ALTOS® Loose Tube, Gel-Free Cable, 48 F, 50 $\mu m$ multimode (OM4)



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

48 F, 50 µm multimode (OM4)



**Notes** 



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