

# ALTOS® Loose Tube, Gel-Free Cable

36 F, 50 µm multimode (OM4)

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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

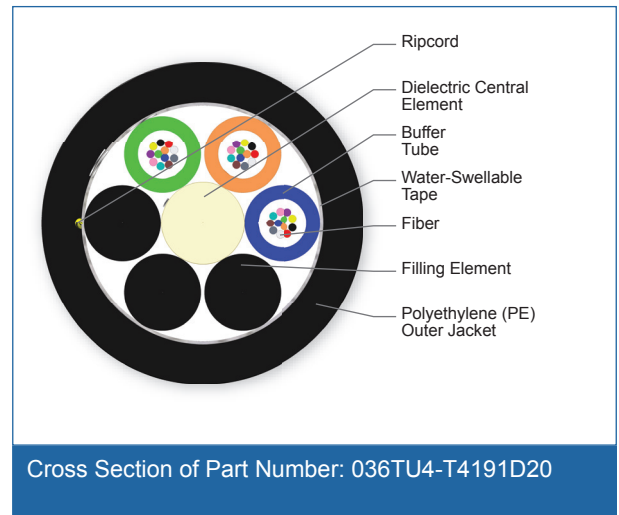
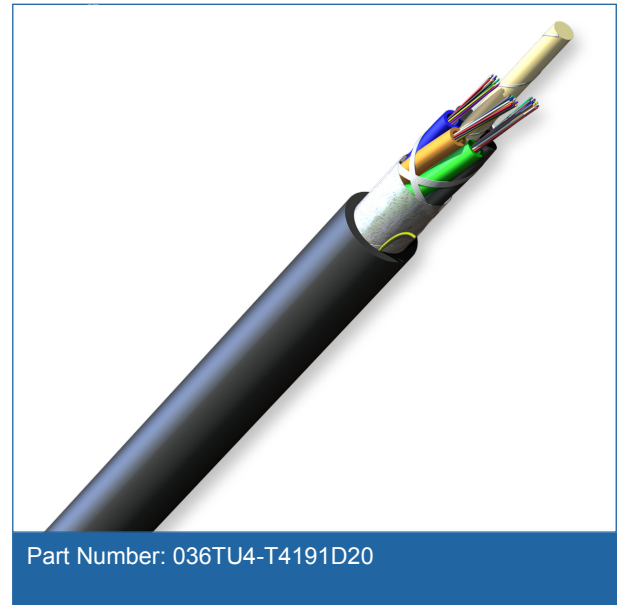
## Standards

### 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                | 36                                                                               |
| 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     | 3                                                                                |
| Buffer Tube Color Coding   | Blue, Orange, Green                                                              |
| Buffer Tube Diameter       | 2.5 mm (0.1 in)                                                                  |
| Number of Filling Elements | 3                                                                                |
| Tape                       | Water-swellaable                                                                 |
| 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                              | T                        |
| 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  $\leq 0.2$  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         | 036TU4-T4191D20                                                |
| Product Description | ALTOS® Loose Tube, Gel-Free Cable, 36 F, 50 µm multimode (OM4) |

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## Notes



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