

# ALTOS® Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

216 F, 50 μm multimode (OM2)

CORNING

ALTOS® gel-free, double-jacket, single-armored cables are rugged, armored cables designed for direct-buried installation while suitable for duct and aerial (lashed) installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

## Features and Benefits

### Gel-free waterblocking technology

Craft-friendly cable preparation

### Corrugated steel tape armor

Provides rodent resistance for direct-buried applications

### Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

### SZ-stranded, loose tube design

Isolates fibers from installation and environmental rigors and facilitates mid-span access

### Dielectric central strength member

No preferential bend and requires no bonding or grounding

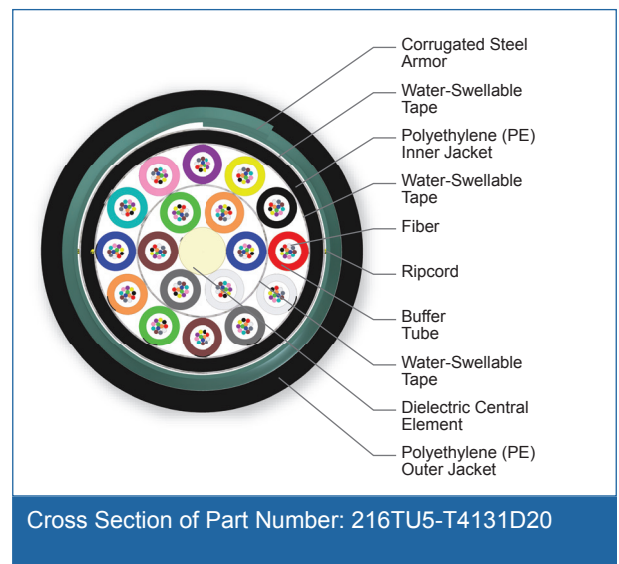
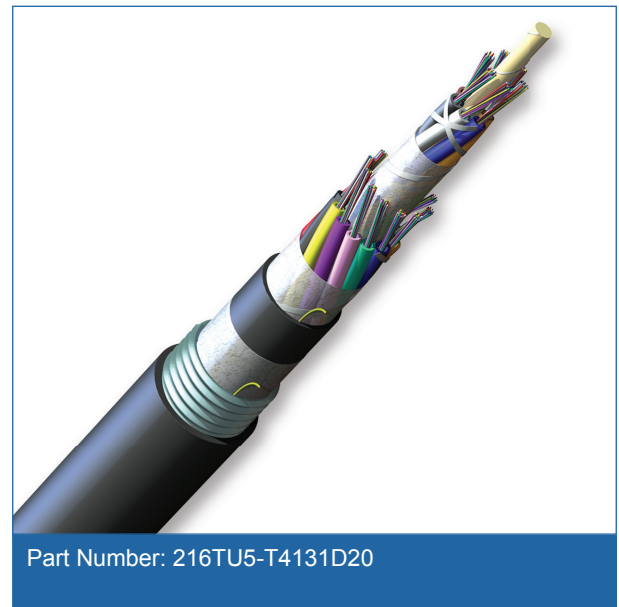
### Medium-density polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

## Standards

**Approvals and Listings**     USDA Rural Development Programs

**Design and Test Criteria**     Telcordia GR-20, ICEA-640



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## Specifications

| General Specifications |                       |
|------------------------|-----------------------|
| Environment            | Outdoor               |
| Application            | Aerial, Direct Buried |
| Cable Type             | Loose Tube            |
| Product Type           | Armored               |
| Fiber Category         | 50 $\mu$ m MM (OM2)   |

| 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   | 216  |
| Fiber Coloring                                      | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua       |
| Fibers per Tube                                     | 12   |
| Number of Tube Positions                            | 18   |
| Number of Active Tubes                              | 18   |
| Buffer Tube Color Coding, Layer 1                   | Blue, Orange, Green, Brown, Slate, White   |
| Buffer Tube Diameter                                | 2.5 mm (0.1 in)  |
| Tape  | Water-swellable  |
| Buffer Tube Color Coding, Layer 2                   | Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White* |
| Tape, Layer 2                                       | Water-swellable  |
| Inner Jacket Material                               | Polyethylene (PE)  |
| Tape, Layer 3                                       | Water-swellable  |
| Number of Ripcords                                  | 3  |
| Tensile Strength Elements and/or Armoring - Layer 1 | Corrugated steel tape armor  |
| Outer Jacket Material                               | Polyethylene (PE)  |
| Outer Jacket Color                                  | Black  |

Notes: Tubes 13 to 24 include a co-extruded stripe that is white for the black tube and black for all other tube colors.

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## Mechanical Characteristics Cable

|                                   |                            |
|-----------------------------------|----------------------------|
| Max. Tensile Strength, Short-Term | 2700 N (600 lbf)           |
| Max. Tensile Strength, Long-Term  | 890 N (200 lbf)            |
| Weight                            | 312 kg/km (209 lb/1000 ft) |
| Nominal Outer Diameter            | 19.9 mm (0.78 in)          |
| Min. Bend Radius Installation     | 299 mm (11.8 in)           |
| Min. Bend Radius Operation        | 199 mm (7.8 in)            |

## Chemical Characteristics

|      |   |
|------|---|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
|------|---|

## Fiber Specifications

### Optical Characteristics (cabled)

|   |                         |
|---|-------------------------|
| Fiber Core Diameter                     | 50 µm                   |
| Fiber Category                          | OM2                     |
| Fiber Code                              | T                       |
| Performance Option Code                 | 31                      |
| Wavelengths                             | 850 nm / 1300 nm        |
| Maximum Attenuation                     | 3.0 dB/km / 1.0 dB/km   |
| Serial 1 Gigabit Ethernet               | 750 m / 500 m           |
| Serial 10 Gigabit Ethernet              | 150 m / -               |
| Min. Overfilled Launch (OFL) Bandwidth  | 700 MHz*km / 500 MHz*km |
| Minimum Effective Modal Bandwidth (EMB) | 950 MHz*km / -          |

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 Customer Care Representative for additional information.

## Ordering Information

|                     |  |
|---------------------|--|
| Part Number         | 216TU5-T4131D20  |
| Product Description | ALTOS® Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable, 216 F, 50 µm multimode (OM2) |
| EAN Code            | 4056418166162  |

# ALTOS<sup>®</sup> Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

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The CORNING logo is a blue square with the word "CORNING" in white, uppercase, sans-serif font centered inside.

## Notes



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