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

144 F, 50 µm multimode (OM2)



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

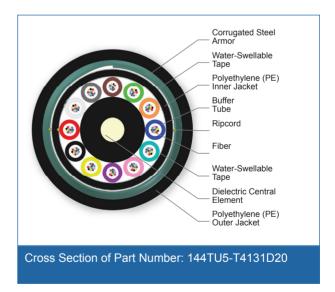
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

#### **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 μm 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   | 144  |
| Fiber Coloring                                      | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua |
| Fibers per Tube                                     | 12   |
| Number of Tube Positions                            | 12   |
| Number of Active Tubes                              | 12   |
| Buffer Tube Color Coding                            | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua |
| Buffer Tube Diameter                                | 2.5 mm (0.1 in)  |
| Tape  | Water-swellable  |
| Inner Jacket Material                               | Polyethylene (PE)  |
| Tape, Layer 2                                       | 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  |

| Mechanical Characteristics Cable  |                  |
|-----------------------------------|------------------|
| Max. Tensile Strength, Short-Term | 2700 N (600 lbf) |
| Max. Tensile Strength, Long-Term  | 890 N (200 lbf)  |



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| Mechanical Characteristics Cable |                            |
|----------------------------------|----------------------------|
| Weight                           | 318 kg/km (213 lb/1000 ft) |
| Nominal Outer Diameter           | 19.7 mm (0.78 in)          |
| Min. Bend Radius Installation    | 296 mm (11.6 in)           |
| Min. Bend Radius Operation       | 197 mm (7.8 in)            |

| <b>Chemical Characteristics</b> |   |
|---------------------------------|---|
| 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                              | Т                       |
| 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 ≤ 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         | 144TU5-T4131D20  |
|---------------------|--|
| Product Description | ALTOS® Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable, 144 F, 50 µm multimode (OM2) |
| EAN Code            | 4056418167411  |



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

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CORNING

**Notes** 



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