

ALTOS® Low-Temperature, Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable

144 F, 50 μm multimode (OM2)

CORNING

Corning ALTOS® low-temperature cables are designed for extreme cold temperature environments with an extended operating range of -50° to +70°C (-58° to +158°F). Dielectric and armored jackets allow for duct, direct-buried or aerial (lashed) installation.

Features and Benefits

Extended operating temperature range of -50° to +70°C (-58° to +158°F)

Allows for operation at extreme low temperatures

Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

Innovative waterblocking design

Provides efficient and craft-friendly cable preparation

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

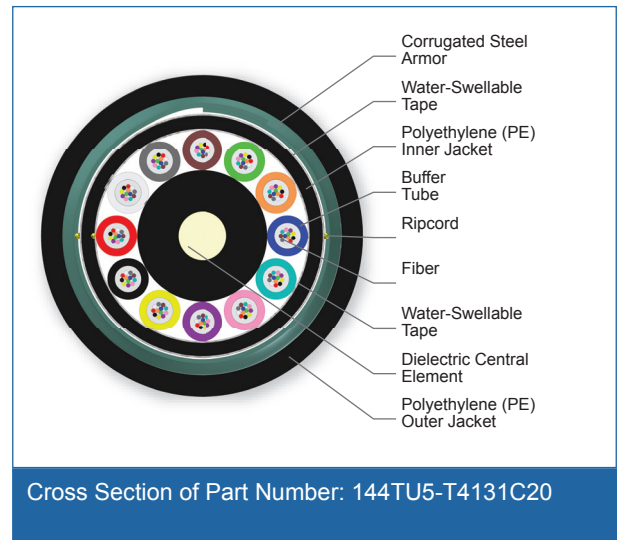
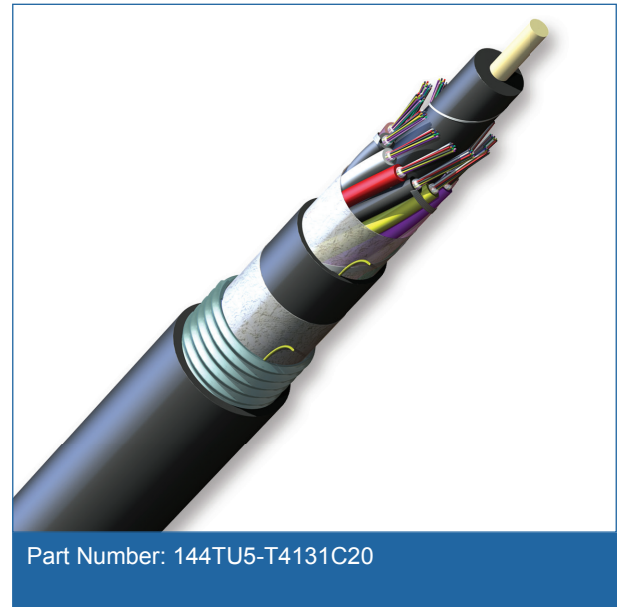
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

Standards

Approvals and Listings USDA Rural Development Programs

Common Installations Designed for Direct-Buried Applications

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



ALTOS® Low-Temperature, Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable

144 F, 50 µm multimode (OM2)

CORNING

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 | -50 °C to 70 °C (-58 °F to 158 °F) |
| Installation | -30 °C to 70 °C (-22 °F to 158 °F) |
| Operation | -50 °C to 70 °C (-58 °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 |
| Tensile Strength Elements and/or Armoring - Layer 1 | Corrugated steel tape armor |
| Number of Ripcords | 3 |
| 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) |

ALTOS® Low-Temperature, Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable

144 F, 50 µm multimode (OM2)

CORNING

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) |

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 ≤ 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-T4131C20 |
| Product Description | ALTOS® Low-Temperature, Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable, 144 F, 50 µm multimode (OM2) |
| EAN Code | 4056418167428 |

ALTOS[®] Low-Temperature, Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable

144 F, 50 μ m multimode (OM2)

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

Notes



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA

800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks.

All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified.

© 2016 Corning Optical Communications. All rights reserved.