192 F, 50 µm multimode (OM2)



Corning ALTOS® gel-free, 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 jackets allow for duct 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

Gel-free waterblocking technology

Craft-friendly cable preparation

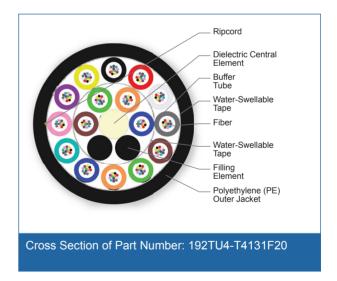
Medium-density polyethylene jacket

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

# Part Number: 192TU4-T4131F20

### **Standards**

| Approvals and Listings   | USDA Rural Development<br>Programs |
|--------------------------|------------------------------------|
| Common Installations     | Outdoor duct and aerial            |
| Design and Test Criteria | Telcordia GR-20, ICFA-640          |



### **Specifications**

| General Specifications |              |
|------------------------|--------------|
| Environment            | Outdoor      |
| Application            | Aerial, Duct |
| Cable Type             | Loose Tube   |



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| General Specifications |                |
|------------------------|----------------|
| Product Type           | Dielectric     |
| 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                       | 192  |
| 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            | 16   |
| Buffer Tube Color Coding, Layer 1 | Blue, Orange, Green, Brown   |
| Buffer Tube Diameter              | 2.5 mm (0.1 in)  |
| Number of Filling Elements        | 2  |
| Tape                              | Water-swellable  |
| Buffer Tube Color Coding, Layer 2 | Slate, White, Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown* |
| Tape, Layer 2                     | Water-swellable  |
| Number of Ripcords                | 1  |
| 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.

| Mechanical Characteristics Cable  |                           |
|-----------------------------------|---------------------------|
| Max. Tensile Strength, Short-Term | 2700 N (600 lbf)          |
| Max. Tensile Strength, Long-Term  | 890 N (200 lbf)           |
| Weight                            | 147 kg/km (99 lb/1000 ft) |
| Nominal Outer Diameter            | 16 mm (0.63 in)           |



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| Mechanical Characteristics Cable |                 |
|----------------------------------|-----------------|
| Min. Bend Radius Installation    | 240 mm (9.4 in) |
| Min. Bend Radius Operation       | 160 mm (6.3 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                              | 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         | 192TU4-T4131F20   |
|---------------------|---|
| Product Description | ALTOS® Low-Temperature, Loose Tube, Gel-Free Cable, 192 F, 50 $\mu$ m multimode (OM2) |
| EAN Code            | 4056418163031   |



192 F, 50 µm multimode (OM2)

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**Notes** 



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