

# ALTOS® Loose Tube, Gel-Filled Cable

432 fibres, 50 µm multimode (OM2)

CORNING

Corning ALTOS® all-dielectric cables are lightweight cables designed 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 fibre.

## Features and Benefits

### Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

### SZ-stranded, loose tube design

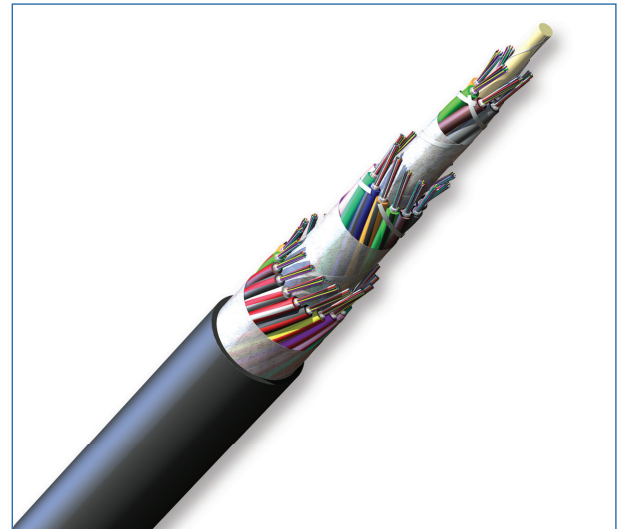
Isolates fibres from installation and environmental rigors and facilitates mid-span access

### 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



Part Number: 432TU4-T4131A20

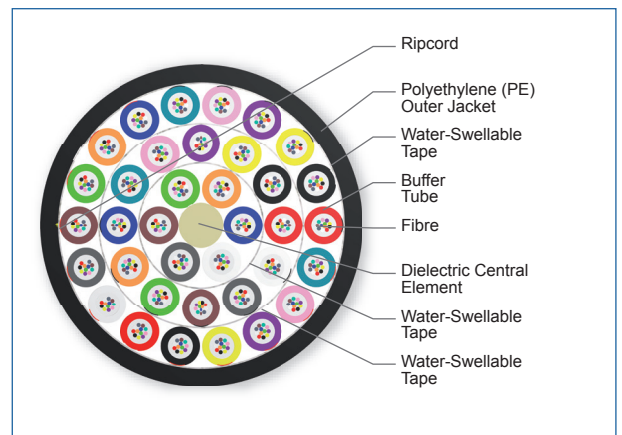
## Standards

### Approvals and Listings

USDA Rural Development Programs

### Design And Test Criteria

Telcordia GR-20, ICEA-640



Cross Section of Order Number: 432TU4-T4131A20

## Specifications

### General Specifications

|             |              |
|-------------|--------------|
| Environment | Outdoor      |
| Application | Aerial, Duct |
| Cable type  | Loose Tube   |

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## General Specifications

|                |                |
|----------------|----------------|
| Product type   | Dielectric     |
| Fibre Category | 50 µm MM (OM2) |

## Temperature Range

|                           |                                    |
|---------------------------|------------------------------------|
| Storage                   | -40 °C to 70 °C (-40 °F to 158 °F) |
| Installation and assembly | -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                                                                                 |
| Fibre Count                        | 432                                                                                        |
| Fibre colouring                    | Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise       |
| Fibres per tube                    | 12                                                                                         |
| Number of Tube Positions           | 36                                                                                         |
| Number of Active Tubes             | 36                                                                                         |
| Buffer tube colour coding, Layer 1 | Blue, orange, green, brown, grey, white                                                    |
| Buffer tube diameter               | 2.5 mm (0.1 in)                                                                            |
| Tape                               | Water-swellaable                                                                           |
| Buffer tube colour coding, Layer 2 | Red, black, yellow, violet, pink, turquoise, blue*, orange*, green*, brown*, grey*, white* |
| Tape, Layer 2                      | Water-swellaable                                                                           |
| Buffer tube colour coding, Layer 3 |                                                                                            |
| Number of ripcords                 | 1                                                                                          |
| Outer jacket material              | Polyethylene (PE)                                                                          |
| Outer jacket colour                | black                                                                                      |
| Maximum Fibres per Tube            | 12                                                                                         |

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

Notes: \*\*Tubes 25 to 36 include a co-extruded stripe that is white for the red tube and red for all other tube colours

## Mechanical Characteristics Cable

|                                   |                            |
|-----------------------------------|----------------------------|
| Max. tensile strength, short-term | 2700 N (600 lbf)           |
| Max. Tensile Strength, Long-Term  | 890 N (200 lbf)            |
| Weight                            | 288 kg/km (194 lb/1000 ft) |
| Nominal Outer Diameter            | 21.2 mm (0.83 in)          |

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## Mechanical Characteristics Cable

|                               |                  |
|-------------------------------|------------------|
| Min. Bend Radius Installation | 318 mm (12.5 in) |
| Min. Bend Radius Operation    | 212 mm (8.3 in)  |

## Chemical Characteristics

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

## Fibre Specifications

### Optical Characteristics (cabled)

|                                         |                         |
|-----------------------------------------|-------------------------|
| Fibre core diameter                     | 50 µm                   |
| Fibre Category                          | OM2                     |
| Fibre 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 fibre 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 fibres available on request.  
4) Contact a Corning Customer Care Representative for additional information

## Ordering Information

|             |                 |
|-------------|-----------------|
| Part Number | 432TU4-T4131A20 |
|-------------|-----------------|



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