

ALTOS® Double-Jacket, Single-Armored Cables, 12-432 Fibers, Enhanced

432 F, 50 μm multimode (OM2)

CORNING

ALTOS® 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

Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

Two jacket layers and two steel tape armor layers

Provide superior rodent resistance for direct-buried applications

Innovative waterblocking design

Provides efficient and craft-friendly cable preparation

Dielectric central strength member

No preferential bend and requires no bonding or grounding

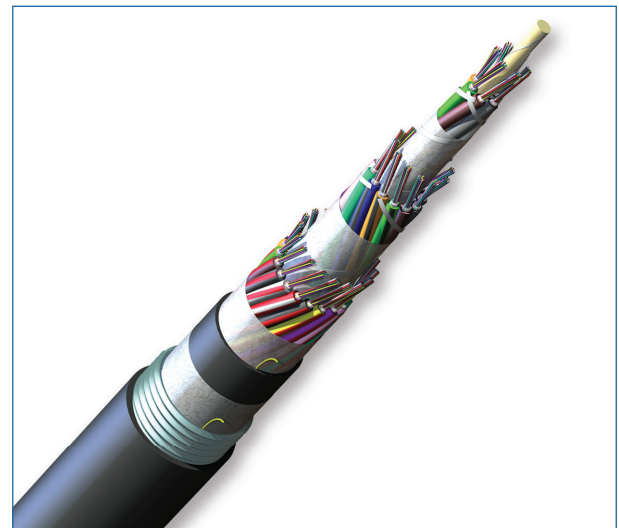
Medium-density polyethylene jacket

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

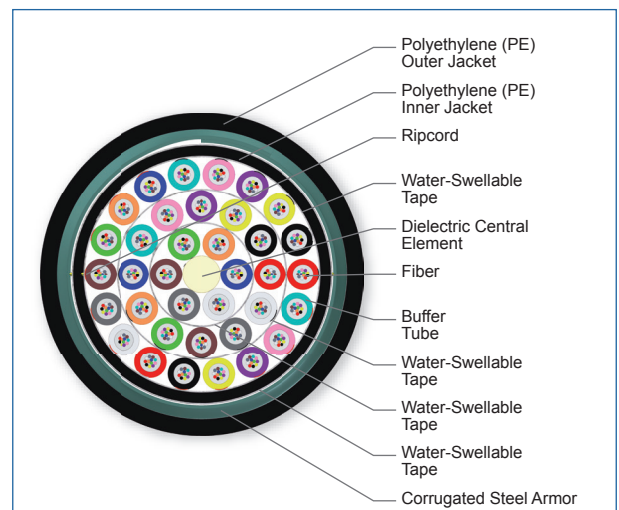
Standards

Approvals and Listings USDA Rural Development Programs

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



Part Number: 432TU5-T4131A20



Cross Section of Part Number: 432TU5-T4131A20

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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 | 432 |
| Fiber Coloring | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua |
| Fibers per Tube | 12 |
| Number of Tube Positions | 36 |
| Number of Active Tubes | 36 |
| 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 |
| Buffer Tube Color Coding, Layer 3 | Red*, Black*, Yellow*, Violet*, Rose*, Aqua*, Blue**, Orange**, Green**, Brown**, Slate**, White**, Red**, Black**, Yellow**, Violet**, Rose**, Aqua** |
| Tape, Layer 3 | Water-swellable |
| Inner Jacket Material | Polyethylene (PE) |
| Tape, Layer 4 | Water-swellable |
| Number of Ripcords | 3 |
| Tensile Strength Elements and/or Armoring - Layer 1 | Corrugated steel tape armor |

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

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

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Cable Design

| | |
|-------------------------|-------------------|
| Outer Jacket Material | Polyethylene (PE) |
| Outer Jacket Color | Black |
| Maximum Fibers 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 colors.

Notes: Tubes 25 to 36 include a co-extruded stripe that is white for the red tube and red 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 | 469 kg/km (315 lb/1000 ft) |
| Nominal Outer Diameter | 25.4 mm (1.0 in) |
| Min. Bend Radius Installation | 381 mm (15.0 in) |
| Min. Bend Radius Operation | 254 mm (10.0 in) |

Chemical Characteristics

| | |
|------|---|
| RoHS | Free of hazardous substances according to RoHS 2002/95/EG |
|------|---|

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.

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Ordering Information

| | |
|---------------------|--|
| Part Number | 432TU5-T4131A20 |
| Product Description | ALTOS® Loose Tube, Gel-Filled, Double-Jacket, Single-Armored Cable, 432 F, 50 µm Multimode (OM2) |



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