84 F, 50 µm multimode (OM4)



Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy mid-span access. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

Features and Benefits

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)

All-dielectric construction

Requires no grounding or bonding

Standards

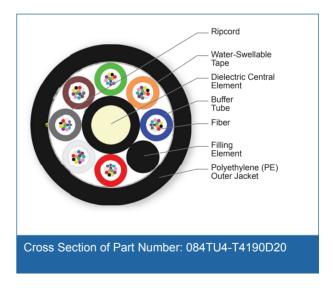
Common Installations Outdoor lashed aerial and

duct; indoor when installed according to National Electrical Code® (NEC®)

Article 770

Design and Test Criteria ANSI/ICEA S-87-640





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Specifications

| General Specifications | |
|------------------------|----------------|
| Environment | Outdoor |
| Application | Aerial, Duct |
| Cable Type | Loose Tube |
| Product Type | Dielectric |
| Fiber Category | 50 μm MM (OM4) |

| 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 | 84 |
| Fiber Coloring | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua |
| Fibers per Tube | 12 |
| Number of Tube Positions | 8 |
| Number of Active Tubes | 7 |
| Buffer Tube Color Coding | Blue, Orange, Green, Brown, Slate, White, Red |
| Buffer Tube Diameter | 2.5 mm (0.1 in) |
| Number of Filling Elements | 1 |
| Tape | Water-swellable |
| Number of Ripcords | 1 |
| Outer Jacket Material | Polyethylene (PE) |
| Outer Jacket Color | Black |
| Maximum Fibers per Tube | 12 |

| Mechanical Characteristics Cable | |
|-----------------------------------|--------------------------|
| Max. Tensile Strength, Short-Term | 2700 N (600 lbf) |
| Max. Tensile Strength, Long-Term | 890 N (200 lbf) |
| Weight | 98 kg/km (66 lb/1000 ft) |
| Nominal Outer Diameter | 12.2 mm (0.48 in) |



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| Mechanical Characteristics Cable | |
|----------------------------------|-----------------|
| Min. Bend Radius Installation | 183 mm (7.2 in) |
| Min. Bend Radius Operation | 122 mm (4.8 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 | OM4 Extended Distance |
| Fiber Code | Т |
| Performance Option Code | 91 |
| Wavelengths | 850 nm / 1300 nm |
| Maximum Attenuation | 3.0 dB/km / 1.0 dB/km |
| Serial 1 Gigabit Ethernet | 1100 m / 600 m |
| Serial 10 Gigabit Ethernet | 600 m / - |
| Min. Overfilled Launch (OFL) Bandwidth | 3500 MHz*km / 500 MHz*km |
| Minimum Effective Modal Bandwidth (EMB) | 5350 MHz*km / - |

^{*} Assumes 0.7 dB maximum total connector/splice loss.

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 | 084TU4-T4190D20 |
|---------------------|---|
| Product Description | ALTOS® Loose Tube, Gel-Free Cable, 84 F, 50 μm multimode (OM4) |
| EAN Code | 4056418168760 |



^{*} Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

84 F, 50 µm multimode (OM4)



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

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