12 F, Single-mode (OS2)



Corning Cable Systems ALTOS® Lite™ Gel-Free, Single-Jacket, Single-Armored Cables are designed for campus backbones in direct-buried installations. The loose tube design provides stable and highly reliable transmission parameters for a variety of voice, data, video and imaging applications. These cables also provide high-fiber density within a given cable diameter while allowing flexibility to suit many system configurations.

The single armored construction provides additional crush and rodent protection with a high-strength ripcord under the armor for easy stripping. Gel-free means the cables are fully waterblocked using craft-friendly, water-swellable materials which make cable access simple and require no clean up. 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 midspan access. 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

#### Corrugated steel tape armor

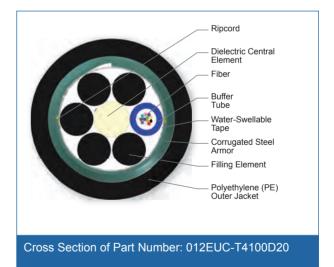
Provides rodent resistance for direct-buried applications

### **Standards**

**Common Installations** 

Outdoor lashed aerial, duct and direct-buried; indoor when installed according to National Electrical Code® (NEC®) Article 770

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





12 F, Single-mode (OS2)



## **Specifications**

| General Specifications |                             |
|------------------------|-----------------------------|
| Environment            | Outdoor                     |
| Application            | Aerial, Direct Buried, Duct |
| Cable Type             | Loose Tube                  |
| Product Type           | Armored                     |
| Fiber Category         | Single-mode (OS2)           |

| 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   | 12   |
| Fiber Coloring                                      | Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua |
| Maximum Fibers per Tube                             | 12   |
| Number of Tube Positions                            | 6  |
| Number of Active Tubes                              | 1  |
| Buffer Tube Color Coding                            | Blue   |
| Buffer Tube Diameter                                | 2.5 mm (0.1 in)  |
| Number of Filling Elements                          | 5  |
| Tape  | Water-swellable  |
| Number of Ripcords                                  | 2  |
| Tensile Strength Elements and/or Armoring - Layer 1 | Corrugated steel tape armor  |
| Outer Jacket Material                               | Polyethylene (PE)  |
| Outer Jacket Color                                  | Black  |

| Mechanical Characteristics Cable |  |
|----------------------------------|--|
| 2700 N (600 lbf)                 |  |
| 890 N (200 lbf)                  |  |
| 129 kg/km (87 lb/1000 ft)        |  |
| 12.1 mm (0.48 in)                |  |
|                                  |  |



12 F, Single-mode (OS2)



| Mechanical Characteristics Cable |                 |
|----------------------------------|-----------------|
| Min. Bend Radius Installation    | 182 mm (7.2 in) |
| Min. Bend Radius Operation       | 121 mm (4.8 in) |

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

## **Fiber Specifications**

| Optical Characteristics (cabled) |                                      |  |
|----------------------------------|--------------------------------------|--|
| Fiber Type                       | Single-mode                          |  |
| Fiber Core Diameter              | 8.2 µm                               |  |
| Fiber Category                   | OS2                                  |  |
| Fiber Code                       | E                                    |  |
| Performance Option Code          | 00                                   |  |
| Wavelengths                      | 1310 nm / 1383 nm / 1550 nm          |  |
| Maximum Attenuation              | 0.35 dB/km / 0.35 dB/km / 0.25 dB/km |  |
| Serial 1 Gigabit Ethernet        | 5000 m / - / -                       |  |
| Serial 10 Gigabit Ethernet       | 10000 m / - / 40000 m                |  |

<sup>\*</sup> ITU-T G.652 D compliant.

Notes: 1) Improved attenuation and bandwidth options available.

- Bend-insensitive single-mode fibers available on request.
- 3) Contact a Corning Cable Systems Customer Care Representative for additional information.

## **Ordering Information**

| Product Description | Loose Tube, Gel-Free, Single-Jacket, Singlee, 12 F, Single-mode (OS2) |
|---------------------|---|



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

12 F, Single-mode (OS2)

CORNING

**Notes** 



Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/cablesystems

A complete listing of the trademarks of Corning Cable Systems is available at www.corning.com/cablesystems/trademarks.

Corning Cable Systems is ISO 9001 certified. © 2012 Corning Cable Systems. All rights reserved.

