

# ALTOS® Loose Tube, Gel-Free, All-Dielectric Cables with Binderless\* FastAccess® Technology 12 F, SMF-28® Ultra fiber, Single-mode (OS2)

CORNING

**Part Number:**  
**012ZU4-T4F22D20**

Corning ALTOS® cable with Binderless\* FastAccess® technology is an all-dielectric gel-free cable designed for outdoor and limited indoor use for lashed aerial and duct installations. The innovative FastAccess technology feature combined with the gel-free binderless loose tube design simplifies removal of the cable jacket and accessing the buffer tubes. The loose tube design uses Corning SMF-28® Ultra fiber to provide reliable transmission parameters for a variety of voice, data, video and imaging applications. The cable is fully waterblocked using craft-friendly, water-swappable materials, which means no cleanup is required. The flexible 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. The all-dielectric gel-free cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to handle.

\*Corning's patented Binderless FastAccess Technology refers to the combination of a Corning FastAccess Technology jacket with an innovative technology used to bind cable construction through the manufacturing process, eliminating the use of binder yarns and waterblocking tapes.

## Features and Benefits

### Binderless\* FastAccess® Technology

Corning's Binderless FastAccess Technology refers to the combination of a Corning FastAccess Technology jacket with an innovative technology used to bind cable construction through the manufacturing process, eliminating the use of binder yarns and waterblocking tapes and resulting in a 25 percent improvement in cable access time. These technologies also reduce the overall risk of inadvertent fiber damage by reducing the need for sharp cable access tools.

### Binderless stranded optical core

Elimination of overlapping yarn binders around stranded tubes to reduce end access time

### Fully waterblocked loose tube, gel-free design

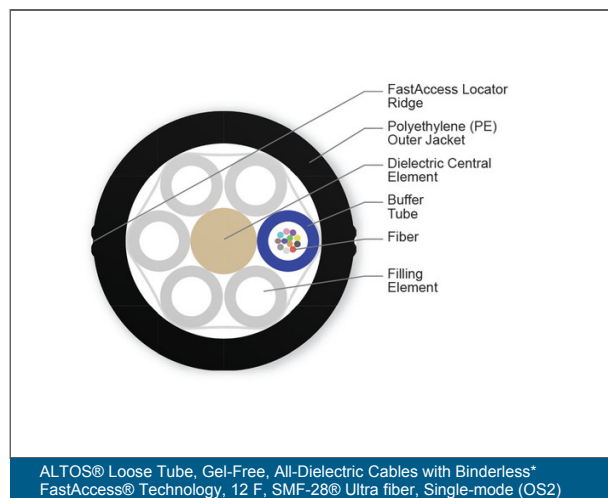
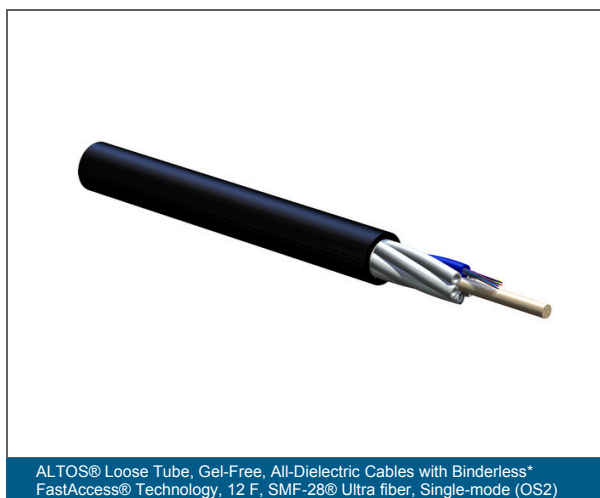
Simple access and no clean up

### Polyethylene jacket

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

### Available with G.652.D and/or G.657.A1 fiber

Ready for any application



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## Specifications

General Specifications	
Installation Methods	Aerial, Duct
Cable Type	Loose Tube
Environment	Outdoor
Product Type	Dielectric
Fiber Category	Single-mode (OS2)
Cable geometry	Round

Standards	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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, Telcordia GR-20, RDUP PE-90

Environmental Conditions	
Notes	Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.
Temperature Range, Installation	-30 °C to 70 °C (-22 °F to 158 °F )
Temperature Range, Operation	-40 °C to 70 °C (-40 °F to 158 °F )
Temperature Range, Storage	-40 °C to 70 °C (-40 °F to 158 °F )

Cable Design	
Cable Print Unit of Measure	Feet
Cable Marking	Feet- Handset - Sine - CORNING OPTICAL CABLE - Year - 12 F, SMF-28® Ultra fiber, with ALTOS (R) CABLE WITH BINDERLESS FAST ACCESS TECHNOLOGY
Central Element	Dielectric
Fiber Count	12

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Cable Design	
Outer Jacket Color	Black
Outer Jacket Material	Polyethylene (PE)
Buffer Tube Color	Blue
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Active Tubes	1
Number of Filling Elements	5
Number of Tube Positions	6
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
SAP Powder	Water-swellable
Color Code Standards	Telcordia

Mechanical Specifications	
Max. Tensile Strength, Long-Term	890 N (200.08 lbf)
Max. Tensile Strength, Short-Term	2700 N (606.98 lbf)
Nominal Outer Diameter	10.2 mm (0.4 in )
Min. Bend Diameter Installation	306 mm (12.05 in)
Min. Bend Diameter Operation	204 mm (8.03 in)

Optical Characteristics	
Fiber Code	Z
Performance Option Code	22
Fiber Category	OS2
Fiber Type	Single-mode (OS2) / 250 µm
Fiber Name	Bend-Improved Single-mode (OS2)
Maximum Attenuation	0.34 dB/km / 0.34 dB/km / 0.22 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Compliance	ITU-T G.652.D and ITU-T G.657.A1

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## Dimensions

Cable Weight	62.5 kg/km (42 lb/1000 ft)
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Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States  
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • [www.corning.com/opcomm](http://www.corning.com/opcomm)

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