

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-swallowable 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

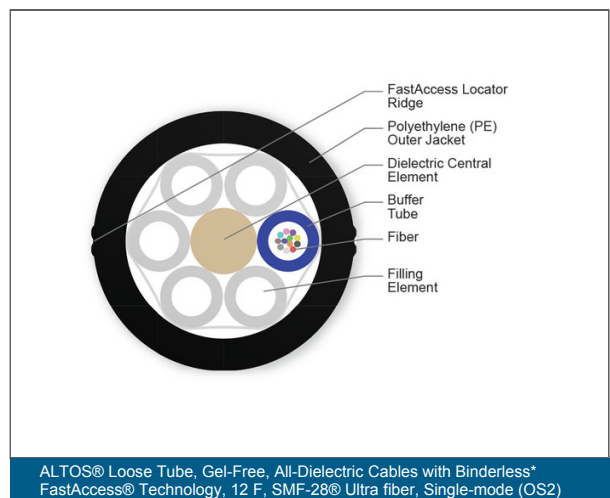
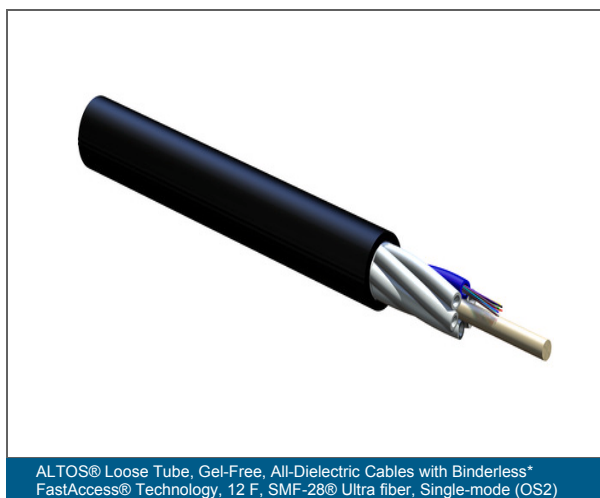
Simple access and no clean up

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



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

CORNING

Specifications

General Specifications

Cable Type	Loose Tube
Environment	Outdoor
Product Type	Dielectric
Fiber Category	Single-mode (OS2)
Application	Aerial, Duct
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

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

CORNING

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-swellaable
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

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



Dimensions	
Cable Weight	62.5 kg/km (42 lb/1000 ft)



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

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2025 Corning Optical Communications. All rights reserved.