CORNING | Cable Systems

ALTOS® Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable, 12 F, Single-mode (OS2)

Part Number: **012EUC-T4100D20**

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.

Part Number	012EUC-T4100D20
Product Description	ALTOS® Lite™ Loose Tube, Gel-Free, Single-Jacket, Single-Armored Cable, 12 F, Single-mode (OS2)
Fiber Category	Single-mode (OS2)
Fiber Count	12
Weight	129 kg/km

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

General Specifications

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

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

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

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)

Mechanical Characteristics Cable

Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	890 N (200 lbf)
Weight	129 kg/km (87 lb/1000 ft)
Nominal Outer Diameter	12.1 mm (0.48 in)
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

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 / - m / - m
Serial 10 Gigabit Ethernet	10000 m / - m / 40000 m

ITU-T G.652 D compliant.

1. Improved attenuation and bandwidth options available.
2. Bend-insensitive single-mode fibers available on request.
3. *Contact a Corning Cable Systems Customer Care Representative for additional information.*