

# ALTOS® Loose Tube, Gel-Free Cable

228 F, Single-mode (OS2)

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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-swellaable 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

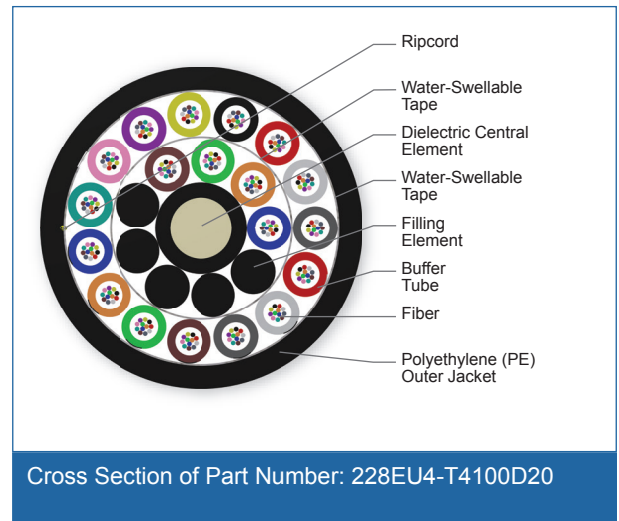
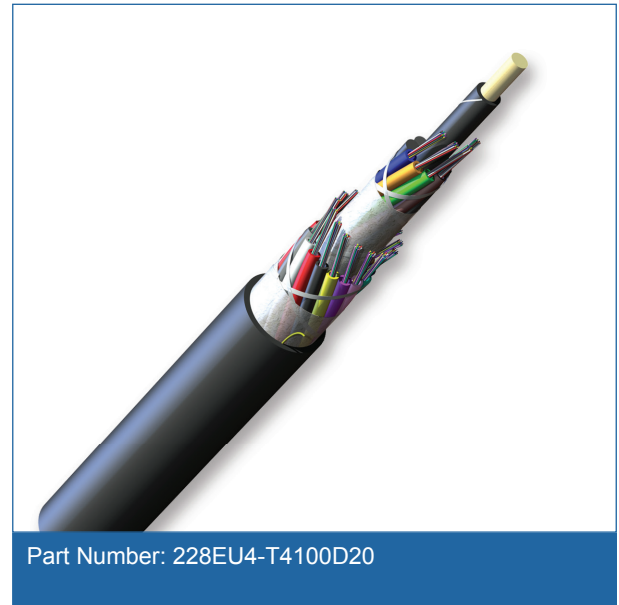
## Standards

### 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	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	228
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	24
Number of Active Tubes	19
Buffer Tube Color Coding, Layer 1	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	5
Tape	Water-swellable
Buffer Tube Color Coding, Layer 2	Slate, White, Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*
Tape, Layer 2	Water-swellable
Number of Ripcords	1
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Maximum Fibers per Tube	12

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## Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	196 kg/km (131 lb/1000 ft)
Nominal Outer Diameter	18.2 mm (0.72 in)
Min. Bend Radius Installation	273 mm (10.7 in)
Min. Bend Radius Operation	182 mm (7.2 in)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Name	Single-mode (OS2)
Fiber Category	G.652.D
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

## Ordering Information

Part Number	228EU4-T4100D20
Product Description	ALTOS® Loose Tube, Gel-Free Cable, 228 F, Single-mode (OS2)
EAN Code	4056418165905



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](http://www.corning.com/opcomm)

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