

# ALTOS® Figure-8 Loose Tube, Gel-Free Armored Cable

216 F, 50  $\mu$ m multimode (OM2)

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Corning ALTOS® figure-8 gel-free cables are self-supporting aerial cables designed for easy and economical one-step installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber. The gel-free design is fully waterblocked using craft-friendly water-swellable materials, making cable access simple and requiring no clean up. While the flexible, craft-friendly buffer tubes are easy to route in closures, the SZ-stranded, loose tube design isolates optical fibers from installation and environmental rigors and facilitates mid-span access.

The figure-8 cable design allows easy, one-step installation, using standard hardware and installation methods. 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)

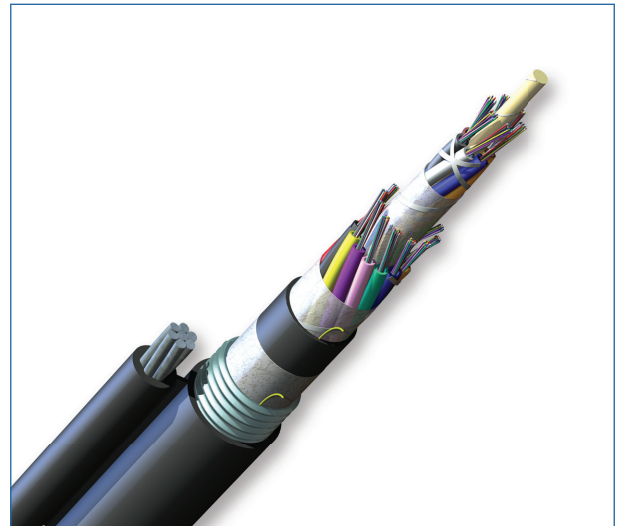
### Figure-8 cable design

Easy, one-step installation

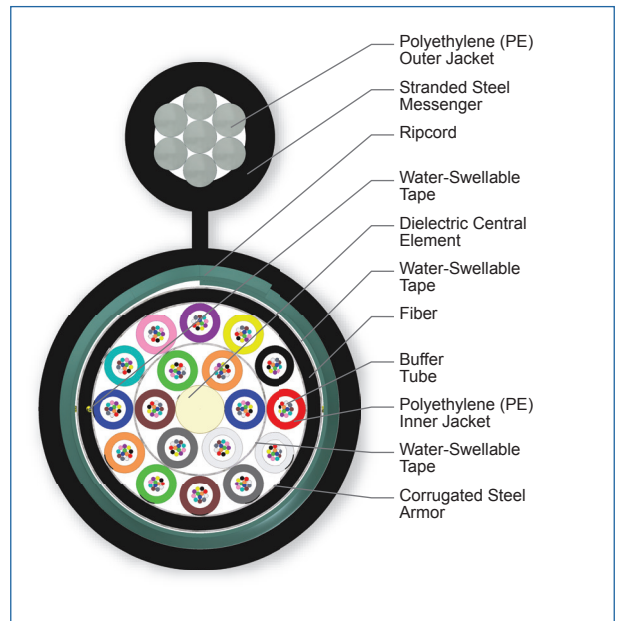
## Standards

<b>Common Installations</b>	Outdoor self-supporting aerial
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<b>Design and Test Criteria</b>	ANSI/ICEA S-87-640
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Part Number: 216TUB-T4131D20



Cross Section of Part Number: 216TUB-T4131D20

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## Specifications

General Specifications	
Environment	Outdoor
Application	Aerial, Self-Supporting
Cable Type	Loose Tube
Product Type	Self-Supporting
Fiber Category	50 µm MM (OM2)

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	216
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	18
Number of Active Tubes	18
Buffer Tube Color Coding, Layer 1	Blue, Orange, Green, Brown, Slate, White
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellaable
Buffer Tube Color Coding, Layer 2	Red, Black, Yellow, Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*
Tape, Layer 2	Water-swellaable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 3	Water-swellaable
Number of Ripcords	3
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Messenger	Stranded steel
Maximum Fibers per Tube	12

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## Mechanical Characteristics Cable

Weight	513 kg/km (344 lb/1000 ft)
Nominal Outer Diameter	19.9 mm (0.78 in)
Nominal Cable Height	31.5 mm (1.24 in)
Min. Bend Radius Installation	299 mm (11.8 in)
Min. Bend Radius Operation	199 mm (7.8 in)

## Maximum Span with One-Percent Installation Sag

Maximum Span with 1% Installation Sag, NESC Light	162 m (530 ft)
Maximum Span with 1% Installation Sag, NESC Medium	158 m (520 ft)
Maximum Span with 1% Installation Sag, NESC Heavy	116 m (380 ft)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Core Diameter	50 µm
Fiber Category	OM2
Fiber Code	T
Performance Option Code	31
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	750 m / 500 m
Serial 10 Gigabit Ethernet	150 m / -
Min. Overfilled Launch (OFL) Bandwidth	700 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	950 MHz*km / -

Notes: 1) 50 µm multimode fiber macrobend loss  $\leq 0.2$  dB at 850 nm for two turns around 7.5 mm radius mandrel.  
2) Improved attenuation and bandwidth options available.  
3) Bend-insensitive single-mode fibers available on request.  
4) Contact a Corning Customer Care Representative for additional information.

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## Ordering Information

Part Number	216TUB-T4131D20
Product Description	ALTOS® Figure-8 Loose Tube, Gel-Free Armored Cable, 216 F, 50 µm multimode (OM2)



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