

ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable

144 F, 50 µm multimode (OM2)

CORNING

Corning ALTOS® gel-free, low-temperature cables are designed for extreme cold temperature environments with an extended operating range of -50° to +70°C (-58° to +158°F). Armored jackets allow for duct, direct-buried or aerial (lashed) installation.

Features and Benefits

Extended operating temperature range of -50° to +70°C (-58° to +158°F)

Allows for operation at extreme low temperatures

Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

Gel-free waterblocking technology

Craft-friendly cable preparation

Dielectric central strength member

No preferential bend and requires no bonding or grounding

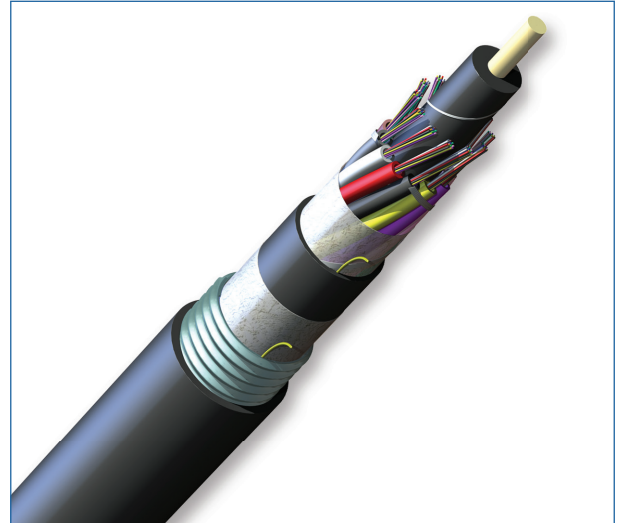
Medium-density polyethylene jacket

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

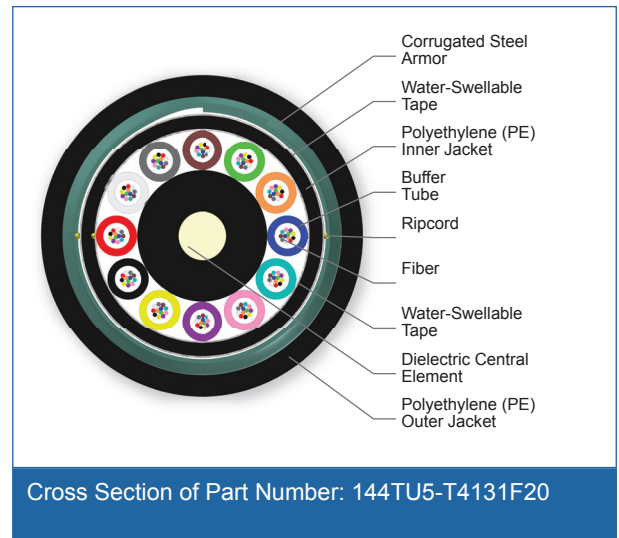
Standards

Approvals and Listings USDA Rural Development Programs

Design and Test Criteria ANSI/ICEA S-87-640



Part Number: 144TU5-T4131F20



Cross Section of Part Number: 144TU5-T4131F20

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Specifications

General Specifications

Environment	Outdoor
Application	Aerial, Direct Buried
Cable Type	Loose Tube
Product Type	Armored
Fiber Category	50 µm MM (OM2)

Temperature Range

Storage	-50 °C to 70 °C (-58 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-50 °C to 70 °C (-58 °F to 158 °F)

Cable Design

Central Element	Dielectric
Fiber Count	144
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	12
Number of Active Tubes	12
Buffer Tube Color Coding	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Buffer Tube Diameter	2.5 mm (0.1 in)
Tape	Water-swellaable
Inner Jacket Material	Polyethylene (PE)
Tape, Layer 2	Water-swellaable
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Number of Ripcords	3
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)

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Mechanical Characteristics Cable

Weight	303 kg/km (203 lb/1000 ft)
Nominal Outer Diameter	19.7 mm (0.78 in)
Min. Bend Radius Installation	296 mm (11.6 in)
Min. Bend Radius Operation	197 mm (7.8 in)

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 ≤ 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.

Ordering Information

Part Number	144TU5-T4131F20
Product Description	ALTOS® Low-Temperature, Loose Tube, Gel-Free, Double-Jacket, Single-Armored Cable, 144 F, 50 µm multimode (OM2)
EAN Code	4056418167404

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The Corning logo is a blue square with the word "CORNING" in white, serif, uppercase letters.

Notes



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

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