

ALTOS® All-Dielectric Gel-Free Cables

CORNING

Features and Benefits

Fully waterblocked loose tube gel-free design

Simple access and no clean up

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 cable construction

Requires no grounding or bonding

Available in 62.5 μm , 50 μm , single-mode (including bend-insensitive and non-zero dispersion shifted fiber (NZ-DSF) options) and hybrid versions

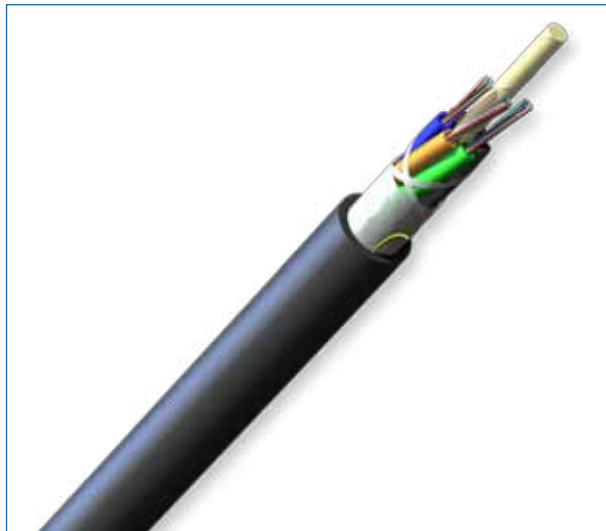
Ready for any application including Gigabit Ethernet and 10 Gigabit Ethernet

Corning Cable Systems 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 midspan 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.

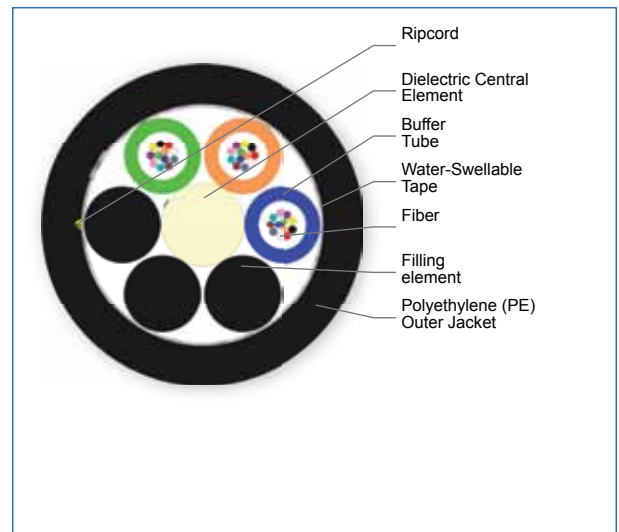
Standards

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
Telcordia GR-20
RDUP PE-90



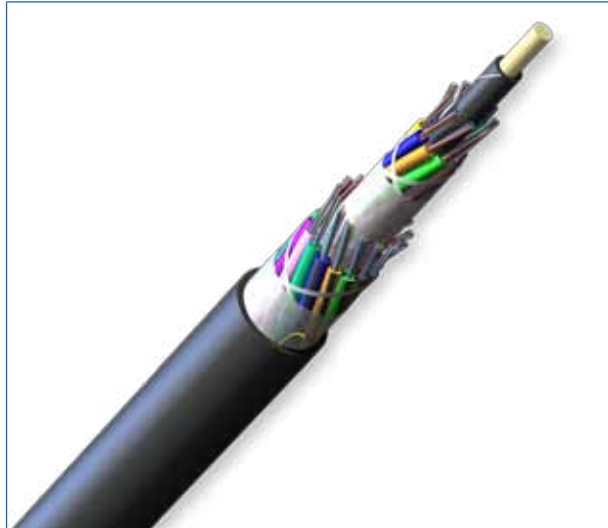
ALTOS® All-Dielectric, Gel-Free Cables, 36-Fibers



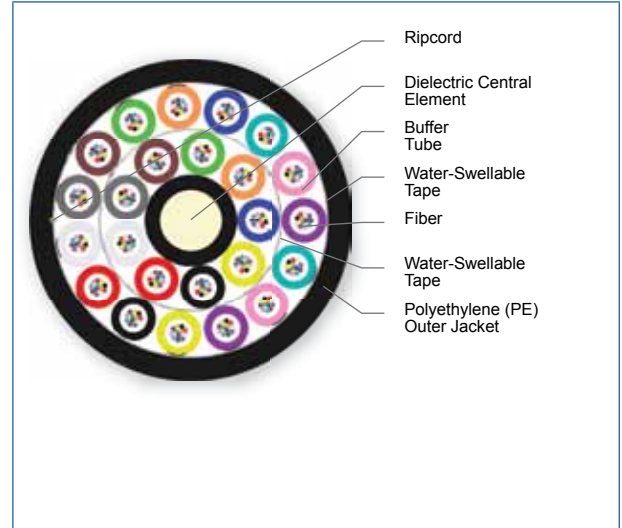
ALTOS® All-Dielectric, Gel-Free Cables, 36-Fibers

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ALTOS® All-Dielectric, Gel-Free Cables, 288-Fibers



ALTOS® All-Dielectric, Gel-Free Cables, 288-Fibers

Specifications

| 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) |

* Corning Cable Systems 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.

| Mechanical Characteristics Cable | |
|------------------------------------|------------------|
| Max. Tensile Strengths, Short-Term | 2700 N (600 lbf) |
| Max. Tensile Strengths, Long-Term | 890 N (200 lbf) |

| Fiber Count | Product Type | Maximum Fibers per Tube | Number of Tube Positions | Number of Active Tubes | Weight | Nominal Outer Diameter | Min. Bend Radius Installation | Min. Bend Radius Operation |
|-------------|--------------|-------------------------|--------------------------|------------------------|-------------------------------|------------------------|-------------------------------|----------------------------|
| 2 - 72 | Dielectric | 12 | 6 | 1 - 6 | 73 kg/km (49 lb/1000 ft) | 10.5 mm (0.41 in) | 158 mm (6.2 in) | 105 mm (4.1 in) |
| 84 - 96 | Dielectric | 12 | 8 | 7 - 8 | 98 kg/km (66 lb/1000 ft) | 12.2 mm (0.48 in) | 183 mm (7.2 in) | 122 mm (4.8 in) |
| 108 - 144 | Dielectric | 12 | 12 | 9 - 12 | 162 kg/km (109 lb/1000 ft) | 15.8 mm (0.62 in) | 237 mm (9.3 in) | 158 mm (6.2 in) |

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| Fiber Count | Product Type | Maximum Fibers per Tube | Number of Tube Positions | Number of Active Tubes | Weight | Nominal Outer Diameter | Min. Bend Radius Installation | Min. Bend Radius Operation |
|-------------|--------------|-------------------------|--------------------------|------------------------|-------------------------------|------------------------|-------------------------------|----------------------------|
| 156 - 216 | Dielectric | 12 | 18 | 13 - 18 | 147 kg/km (99 lb/1000 ft) | 16 mm (0.63 in) | 240 mm (9.4 in) | 160 mm (6.3 in) |
| 228 - 288 | Dielectric | 12 | 24 | 19 - 24 | 196 kg/km (131 lb/1000 ft) | 18.2 mm (0.72 in) | 273 mm (10.7 in) | 182 mm (7.2 in) |

Chemical Characteristics

| | |
|------|---|
| RoHS | Free of hazardous substances according to RoHS 2002/95/EG |
|------|---|

Transmission Performance

| Fiber Type | Multimode | Multimode | Multimode | Multimode | Single-mode | Single-mode |
|--|------------|------------|------------|------------|--------------------|--------------------|
| Fiber Core Diameter (µm) | 62.5 | 50 | 50 | 50 | 8.2 | 8.2 |
| Fiber Category | OM1 | OM2 | OM3 | OM4 | OS2 | OS2 |
| Fiber Code | K | T | T | T | E | E |
| Performance Option Code | 30 | 31 | 80 | 90 | 01 | 00 |
| Wavelengths (nm) | 850 / 1300 | 850 / 1300 | 850 / 1300 | 850 / 1300 | 1310 / 1383 / 1550 | 1310 / 1383 / 1550 |
| Maximum Attenuation (dB/km) | 3.4 / 1.0 | 3.0 / 1.0 | 3.0 / 1.0 | 3.0 / 1.0 | 0.4 / 0.4 / 0.3 | 0.35 / 0.35 / 0.25 |
| Serial 1 Gigabit Ethernet (m) | 300 / 550 | 750 / 600 | 1000 / 600 | 1100 / 600 | 5000 / - / - | 5000 / - / - |
| Serial 10 Gigabit Ethernet (m) | 33 / - | 150 / - | 300 / - | 550 / - | 10000 / - / 40000 | 10000 / - / 40000 |
| Min. Overfilled Launch (OFL) Bandwidth (MHz*km) | 200 / 500 | 700 / 500 | 1500 / 500 | 3500 / 500 | | |
| Minimum Effective Modal Bandwidth (EMB) (MHz*km) | 220 / - | 950 / - | 2000 / - | 4700 / - | | |

* Single-mode (OS2) fiber is ITU-T G.652.D compliant.

* OM4 Multimode fiber 10 Gigabit Ethernet distance assumes 1.0 dB maximum total connector/splice loss.

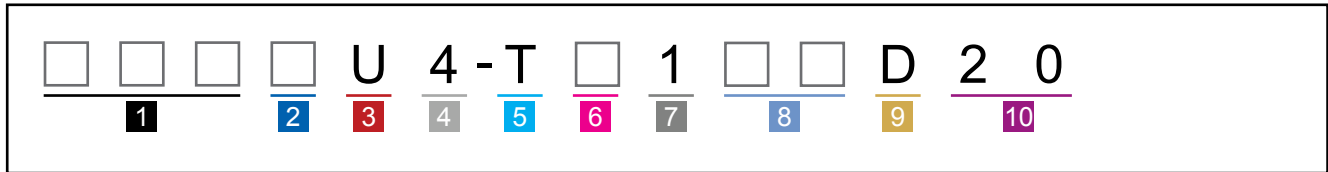
- Notes:
- 1) Improved attenuation and bandwidth options available.
 - 2) Bend-insensitive single-mode fibers available on request.
 - 3) Contact a Corning Cable Systems Customer Care Representative for additional information.
 - 4) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns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

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Ordering Information | Contact Customer Care at 1-800-743-2671 for other options.



1 Select fiber count.
Standard offerings:
002 - 288

2 Select fiber code.
K = 62.5 µm multimode, OM1
T = 50 µm multimode, OM2, OM3, OM4
E = Single-mode, OS2
SMF-28e+®

3 Defines cable type.
U = ALTOS® Loose Tube Cable with 2.5 mm buffer tubes

4 Defines outer jacket.
4 = All-Dielectric

5 Defines fiber placement.
T = 12 fibers/buffer tube (standard)

6 Select length markings.
3 = Markings in meters
4 = Markings in feet (standard)

7 Defines tensile strength.
1 = 2700 N/600 lbf (standard)

8 Select performance option code.
30 = 62.5 µm multimode, OM1
31 = 50 µm multimode, OM2
80 = 50 µm multimode, OM3
90 = 50 µm multimode, OM4
01 = Single-mode, OS2
(Max. attenuation 0.4/0.4/0.3 dB/km)
00 = Single-mode, OS2
(Max. attenuation 0.35/0.35/0.25 dB/km)

9 Defines cable type.
D = Gel-Free Cable

10 Defines special requirements.
20 = No special requirements



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