including Gigabit Ethernet

and 10 Gigabit Ethernet

#### A LANscape® Solutions Product

### features and benefits |

Fully waterblocked
loose tube gel-free
design

Medium-density
polyethylene jacket

All-dielectric cable
construction

Rugged, durable
and easy to strip

Requires no grounding
or bonding

Ready for any application

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-swellable 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. A variety of fiber types are available including 62.5 µm, 50 µm, single-mode and hybrid versions, as well as fibers with Gigabit Ethernet and 10 Gigabit Ethernet performance. These cables are also available with optional extended operating temperature to -50°C (-58°F) in a variety of fiber counts.



50 µm, single-mode

and hybrid versions



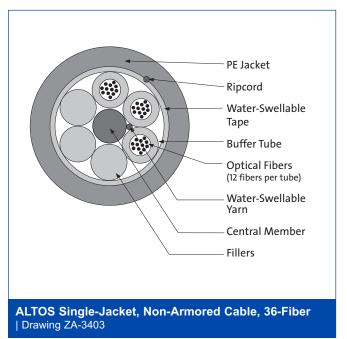


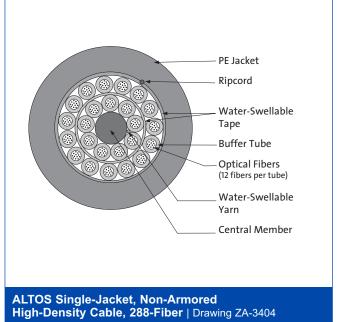


http://www.TWAcomm.com Toll Free: (877) 389-0000



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## specifications |

| Maximum Tensile Loads | Short-Term: | 2700 N (600 lbf) |  |
|-----------------------|-------------|------------------|--|
|                       | Long-Term:  | 890 N (200 lbf)  |  |
|                       |             |                  |  |

| remperatures | Storage:      | -40° to +70°C (-40° to +158°F) |
|--------------|---------------|--------------------------------|
|              | Installation: | -30° to +70°C (-22° to +158°F) |
|              | Operation:    | -40° to +70°C (-40° to +158°F) |

**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

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.

| Fiber<br>Count | Maximum<br>Fibers<br>per Tube | Number<br>of Tube<br>Positions | Number<br>of Active<br>Tubes | Central<br>Member | Nominal<br>Cable Weight<br>kg/km<br>(lb/1000 ft) | Nominal<br>Outside<br>Diameter<br>mm (in) | Minimum Ber<br>Loaded<br>cm (in) | nd Radius<br>Installed<br>cm (in) |
|----------------|-------------------------------|--------------------------------|------------------------------|-------------------|--|---|----------------------------------|-----------------------------------|
| 2-72           | 12                            | 6                              | 1-6                          | Dielectric        | 73 (49)  | 10.5 (0.41)                               | 15.8 (6.2)                       | 10.5 (4.1)                        |
| 73-96          | 12                            | 8                              | 7-8                          | Dielectric        | 98 (66)  | 12.2 (0.48)                               | 18.3 (7.2)                       | 12.2 (4.8)                        |
| 97-144         | 12                            | 12                             | 9-12                         | Dielectric        | 162 (109)  | 15.8 (0.62)                               | 23.7 (9.3)                       | 15.8 (6.2)                        |
| 145-216        | 12                            | 18                             | 13-18                        | Dielectric        | 147 (99)   | 16.0 (0.63)                               | 24.0 (9.4)                       | 16.0 (6.3)                        |
| 217-288        | 12                            | 24                             | 19-24                        | Dielectric        | 196 (131)  | 18.2 (0.72)                               | 27.3 (10.7)                      | 18.2 (7.2)                        |







A LANscape® Solutions Product

## transmission performance |

|   | LANscape® 62.5<br>Solutions | LANscape<br>Pretium® 150<br>Solutions | LANscape<br>Pretium 300<br>Solutions | LANscape<br>Pretium 550<br>Solutions | LANscape<br>Pretium 600<br>Solutions | Single-Mode     |
|---|-----------------------------|---------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------|
| Fiber Code  | K                           | Т                                     | Т                                    | Т                                    | Т                                    | E               |
| Performance<br>Option Code                                      | 30                          | 31                                    | 80                                   | 90                                   | 91                                   | 01              |
| Optical Fiber<br>Type (µm)                                      | 62.5<br>Multimode           | 50<br>Multimode                       | 50<br>Multimode                      | 50<br>Multimode                      | 50<br>Multimode                      | Single-mode**** |
| ISO/IEC<br>11801<br>Nomenclature                                | OM1                         | OM2                                   | OM3***                               | OM4***                               | OM4***                               | OS2             |
| Wavelength (nm)   | 850/1300                    | 850/1300                              | 850/1300                             | 850/1300                             | 850/1300                             | 1310/1383/1550  |
| Maximum<br>Attenuation<br>(dB/km)                               | 3.4/1.0                     | 3.0/1.0                               | 3.0/1.0                              | 3.0/1.0                              | 3.0/1.0                              | 0.4/0.4/0.3     |
| Minimum<br>Over Filled<br>Launch (OFL)<br>Bandwidth<br>(MHz•km) | 200/500                     | 700/500                               | 1500/500                             | 3500/500                             | 3500/500                             | -1-1-           |
| Minimum<br>Effective<br>Modal<br>Bandwidth<br>(EMB)<br>(MHz•km) | 220/ –                      | 950/ —                                | 2000/ –                              | 4700/ –                              | 5350/ —                              | -1-1-           |
| Serial 1<br>Gigabit<br>Ethernet<br>Distance (m)                 | 300/550                     | 750/600                               | 1000/600                             | 1100/600                             | 1100/600                             | 5000 / – / –    |
| Serial 10<br>Gigabit<br>Ethernet<br>Distance (m)                | 33/ –                       | 150/ —                                | 300/ —                               | 550*/ –                              | 600**/ —                             | 10000/ — /40000 |

<sup>\*</sup> 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 Service 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.







<sup>\*\*</sup> Assumes 0.7 dB maximum total connector/splice loss.

<sup>\*\*\*</sup> Meets 0.75 ns optical skew when used in all Coming Cable Systems Plug & Play™ Systems solutions.

<sup>\*\*\*\*</sup> ITU 652.D compliant.

A LANscape®
Solutions Product

**ordering information** Contact Customer Service at 800-743-2671 for non-standard offerings.

|   |   |            |   | U | 4 | - T | 4 | 1 |    |    | D  | 2  | 0  |
|---|---|------------|---|---|---|-----|---|---|----|----|----|----|----|
| 1 | 2 | <b> </b> 3 | 4 | 5 | 6 | 7   | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

1-3

Select fiber count.
Standard offerings:
012 048 096 216
024 060 144 288
036 072 192

4

Select fiber type (see Transmission Performance table).

5 / 12

Defines cable type.
U/D = ALTOS® Gel-Free
Cable

6

Defines outer jacket. 4 = All-dielectric

7

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

8

Defines length markings. 4 = Markings in feet (standard)

9

Defines tensile strength (see Specifications).

10-11

Select performance option code (see Transmission Performance table).

13-14

Defines special requirements. 20 = No special requirements

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