ALTOS® Lite™ Gel-Free, Single-Jacket, Single-Armored Cables, 6-288 Fibers

CORNING

Features and Benefits

Fully waterblocked loose tube, gel-free design
Simple access and no clean up

Single-armored construction
Provides additional crush and rodent protection

High-strength ripcord
Ease of stripping

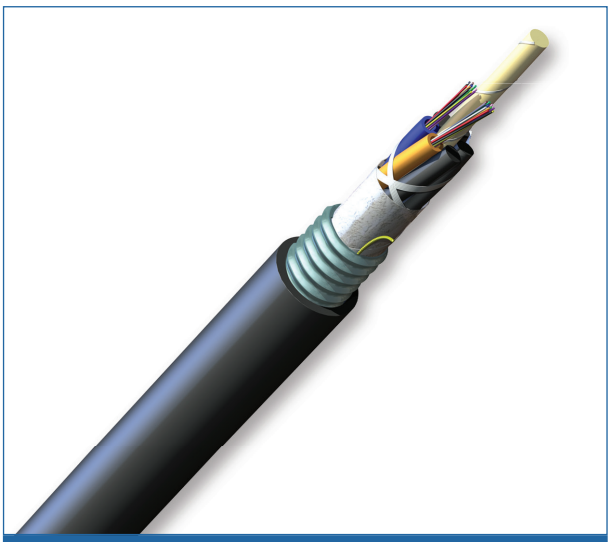
Medium-density polyethylene jacket
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

Available in 62.5 µm, 50 µm, single-mode (including bend-insensitive and non-zero dispersion-shifted (NZ-DSF) fiber options) and hybrid versions
Ready for any application including Gigabit Ethernet and 10 Gigabit Ethernet

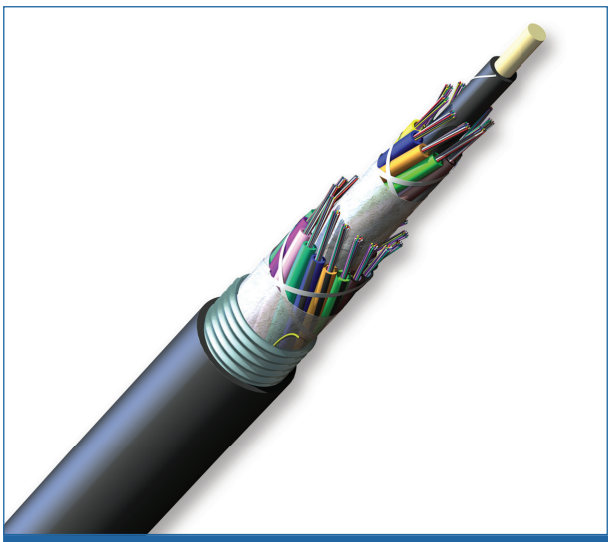
Corning ALTOS® Lite™ gel-free, single-jacket, single-armored cables are designed for campus backbones in direct-buried installations. The loose tube design provides stable and highly reliable transmission parameters for a variety of voice, data, video and imaging applications. These cables also provide high-fiber density within a given cable diameter while allowing flexibility to suit many system configurations.

The single armored construction provides additional crush and rodent protection with a high-strength ripcord under the armor for easy stripping. Gel-free means the cables are fully waterblocked using craft-friendly, water-swellable materials which make cable access simple and require no clean up. 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. 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.



ALTOS Lite Gel-Free, Single-Jacket, Single-Armored Cables, 24 Fibers | Photo PIM2443



ALTOS Lite Gel-Free, Single-Jacket, Single-Armored Cables, 288 Fibers | Photo PIM2452

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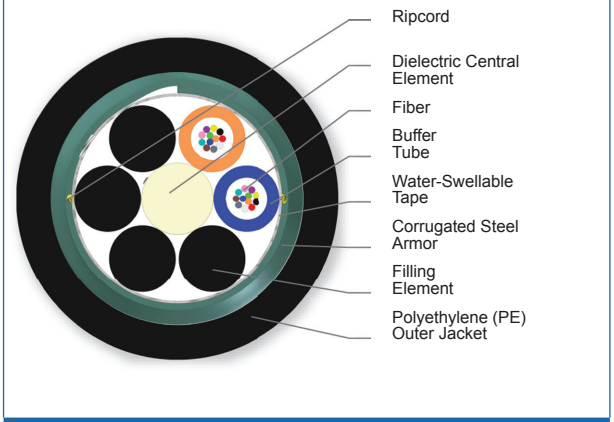
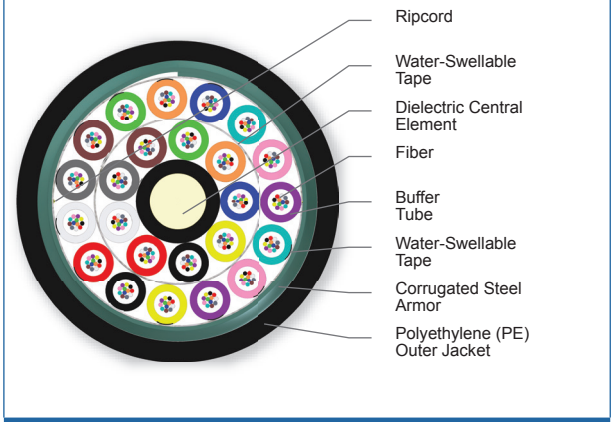
Standards

Common Installations	Outdoor lashed aerial, duct and direct-buried; 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 Lite Gel-Free, Single-Jacket, Single-Armored



ALTOS Lite Gel-Free, Single-Jacket, Single-Armored

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)

** Note: Corning 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.*

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

Mechanical Characteristics Cable

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
4 - 72	Armored	12	6	1 - 6	129 kg/km (87 lb/1000 ft)	12.1 mm (0.48 in)	182 mm (7.2 in)	121 mm (4.8 in)
96	Armored	12	8	8	162 kg/km (109 lb/1000 ft)	13.8 mm (0.54 in)	207 mm (8.1 in)	138 mm (5.4 in)
144	Armored	12	12	12	245 kg/km (164 lb/1000 ft)	17.5 mm (0.69 in)	263 mm (10.4 in)	175 mm (6.9 in)
192 - 216	Armored	12	18	16 - 18	233 kg/km (156 lb/1000 ft)	17.7 mm (0.7 in)	266 mm (10.5 in)	177 mm (7 in)
288	Armored	12	24	24	293 kg/km (196 lb/1000 ft)	20 mm (0.79 in)	300 mm (11.8 in)	200 mm (7.9 in)

Chemical Characteristics

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

Transmission Performance

Multimode				
Fiber Core Diameter (µm)	62.5	50	50	50
Fiber Category	OM1	OM2	OM3	OM4
Fiber Code	K	T	T	T
Performance Option Code	30	31	80	90
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-
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/-

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Single-mode					
Fiber Name	SMF-28e+® LL	SMF-28® Ultra fiber**	Single-mode (OS2)	Single-mode (OS2)	LEAF® fiber
Fiber Category	G.652.D	G.652.D/G.657.A1	G.652.D	G.652.D	G.655
Fiber Code	L	Z	E	E	F
Performance Option Code	22	22	00	01	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.34/0.34/0.22	0.34/0.34/0.22	0.35/0.35/0.25	0.4/0.4/0.3	-/-/0.25
Typical Attenuation* (dB/km)	0.32/0.32/0.18	0.32/0.32/0.18	-	-	-/-/0.19

Fiber Name	SMF-28® ULL
Fiber Category	G.652
Fiber Code	P
Performance Option Code	19
Wavelengths (nm)	1310/1383/1550
Maximum Attenuation (dB/km)	0.33/-/0.19
Typical Attenuation* (dB/km)	0.31/-/0.17

** For more information on typical attenuation please see the Corning whitepaper at http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/LAN-1863-AEN.pdf*

** * SMF-28® Ultra fiber delivers up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.*

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Ordering Information | *Note: Contact Customer Care at 1-800-743-2675 for other options.*

□ □ □	□	U	C-	□	□	1	□	□	D	2 0
1	2	3	4	5	6	7	8		9	10

1 Select fiber count.
Standard offerings:
006-288 (Increments of 12)

2 Select fiber code.
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2/OM3/OM4)
E = Single-mode (G.652.D)
L = Single-mode (G.652.D) SMF-28e+® LL
Z = Single-mode (G.652.D/ G.657.A1) SMF-28® Ultra
P = Single-mode (G.652) SMF-28® ULL
F = Single-mode (G.655) LEAF®

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

4 Defines outer jacket.
C = Single-jacket, single-armored

5 Select fiber placement.
T = 12 fibers/buffer tube (standard)
6 = 6 fibers/buffer tube
See Note 1.

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)
22 = Single-mode (OS2)
(Max. attenuation 0.34/0.34/0.22 dB/km)
19 = Single-mode (Ultra Low-Loss)
(Max. attenuation 0.33/–/0.19 dB/km)
01 = Single-mode NZDSF*
(Max. attenuation –/–/0.25 dB/km)
**Non-Zero Disperson-Shifted Single-mode Fiber*

9 Defines cable type.
D = Gel-free cable

10 Defines special requirements.
20 = No special requirements

1) Cable outer diameter may change. Example: 48 F cable with 6 fibers per tube will require 8 active buffer and have an OD like a standard 96 F cable.

RoHS COMPLIANT

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