ALTOS® Gel-Free, Triple-Jacket, Double-Armored Cables, 12-216 Fibers

CORNING

Features and Benefits

Three jacket layers and two steel tape armor layers
Provide superior rodent resistance for direct-buried applications

Flexible, craft-friendly buffer tubes
Facilitate easy routing in closures

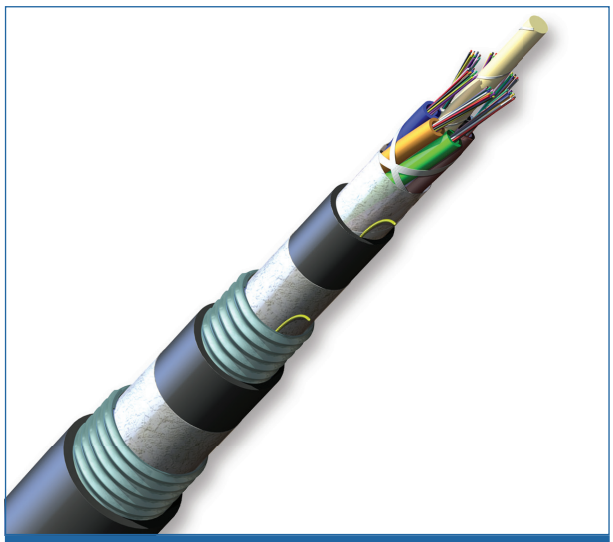
Totally gel-free cable design with innovative water-blocking technology
Makes fiber access simple and clean

Polyethylene jacket
Rugged, durable and easy to strip

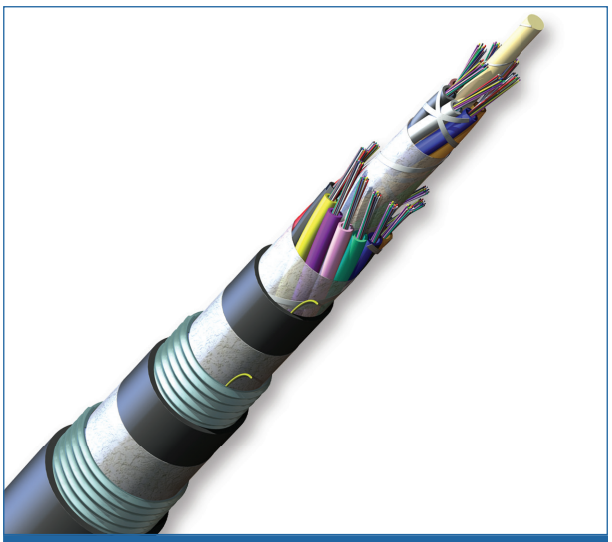
Corning ALTOS® gel-free triple-jacket, double-armored cables are rugged, armored cables designed for direct-buried installations. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

Standards

Design and Test Criteria	ANSI/ICEA S-87-640, Telcordia GR-20, RDUP PE-90



ALTOS Gel-Free Triple-Jacket, Double-Armored Cables, 72 Fibers | Photo PIM0573



ALTOS Gel-Free Triple-Jacket, Double-Armored Cables, 216 Fibers | Photo PIM0577

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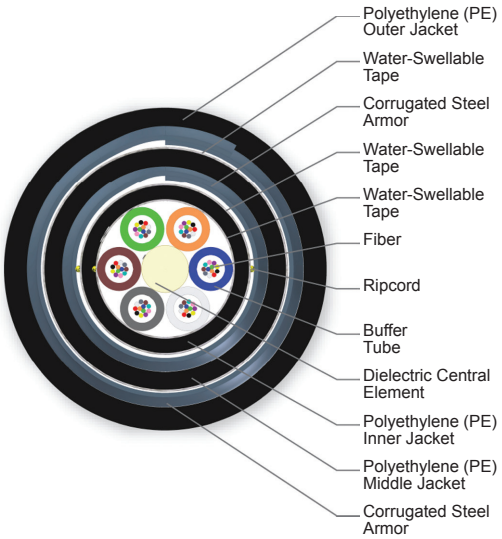
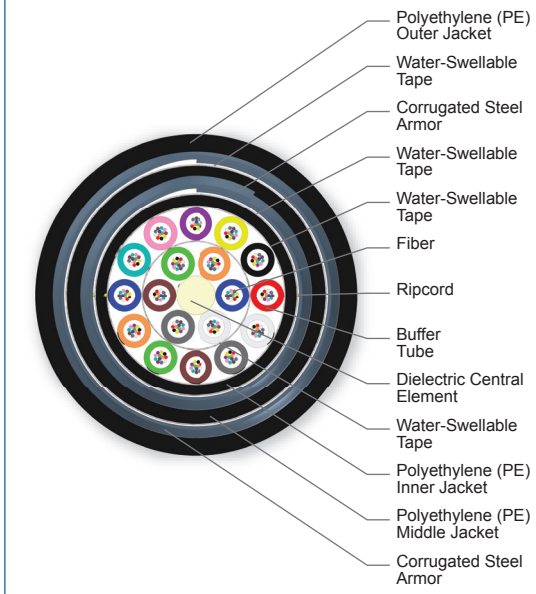


ALTOS Gel-Free Triple-Jacket, Double-Armored Cables, 72 Fibers | Photo PIM1472



ALTOS Gel-Free Triple-Jacket, Double-Armored Cables, 216 Fibers | Photo PIM1476

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.*

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

Fiber Count	Product Type	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation
12 - 72	Armored	6	1 - 6	310 kg/km (208 lb/1000 ft)	18.3 mm (0.72 in)	275 mm (10.8 in)	183 mm (7.2 in)
96	Armored	8	8	361 kg/km (242 lb/1000 ft)	20 mm (0.79 in)	300 mm (11.8 in)	200 mm (7.9 in)

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Fiber Count	Product Type	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation
144	Armored	12	12	487 kg/km (327 lb/1000 ft)	23.8 mm (0.94 in)	357 mm (14.1 in)	238 mm (9.4 in)
192 - 216	Armored	18	16 - 18	473 kg/km (317 lb/1000 ft)	24 mm (0.94 in)	360 mm (14.2 in)	240 mm (9.4 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

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	TXF™ fiber	
Fiber Category	G.652	G.654.E	
Fiber Code	P	D	
Performance Option Code	19	01	
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	
Maximum Attenuation (dB/km)	0.33/-/0.19	-/-/0.20	
Typical Attenuation* (dB/km)	0.31/-/0.17	-/-/0.18	

** 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.*

1	2	3	4	5	6	7	8	9	10
☐☐☐	☐	U	6 -	☐	☐	1	☐☐	D	20

1 Select fiber count.
Standard offerings:
012-216 (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®
D = TXF™ Single-mode (G.654.E)

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

4 Defines outer jacket.
6 = Triple-jacket, double-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 (TXF)
(Max. attenuation –/–/0.20 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 manufacturing code.
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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