

# ALTOS® Gel-Free Double-Jacket, Dielectric Cables, 12-288 Fibers

CORNING

## Features and Benefits

### Two jacket layers

Provides extra protection in harsh environments

### 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

### Medium-density polyethylene jacket

Makes cable rugged and durable while being flexible and easy to strip

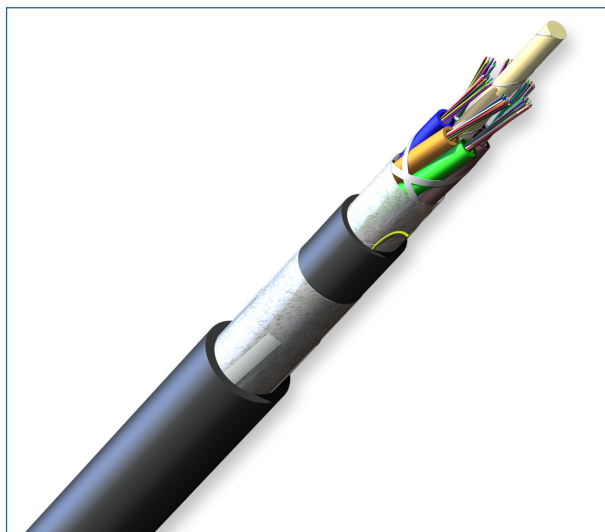
### Exceeds the RDUP requirements for mid-span buffer tube slack storage

Provides flexibility for mid-span access applications

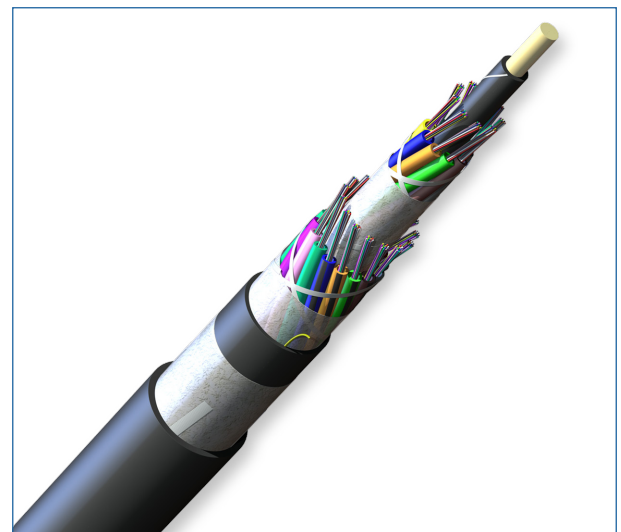
ALTOS® gel-free double-jacket, dielectric cables are designed for duct and aerial (lashed) installation. The double-jacket construction adds a layer of protection for harsh environments. The loose tube cable design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

## Standards

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



ALTOS Gel-Free Double-Jacket, Dielectric Cables, 72 Fibers | Photo PIM1451

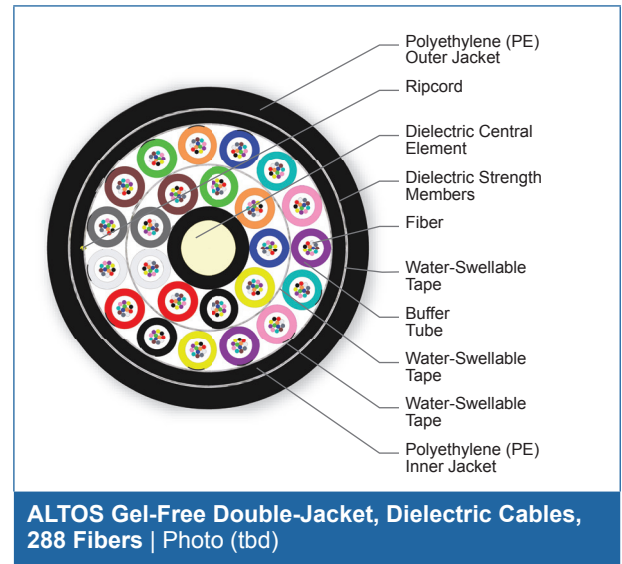
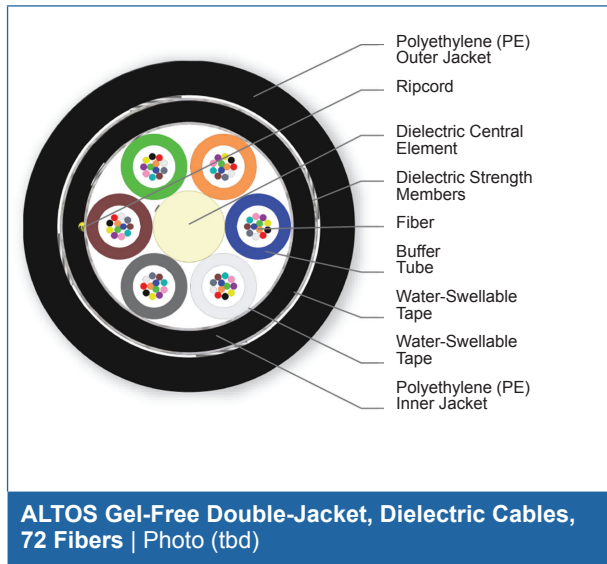


ALTOS Gel-Free Double-Jacket, Dielectric Cables, 288 Fibers | Photo PIM 1456

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## 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.

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
12 - 72	Dielectric	12	6	1 - 6	107 kg/km (72 lb/1000 ft)	12.5 mm (0.49 in)	188 mm (7.4 in)	125 mm (4.9 in)
96	Dielectric	12	8	8	137 kg/km (92 lb/1000 ft)	14.2 mm (0.56 in)	213 mm (8.4 in)	142 mm (5.6 in)
144	Dielectric	12	12	12	209 kg/km (140 lb/1000 ft)	17.7 mm (0.70 in)	266 mm (10.5 in)	177 mm (7 in)

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## 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
192 - 216	Dielectric	12	18	16 - 18	195 kg/km (131 lb/1000 ft)	17.9 mm (0.70 in)	269 mm (10.6 in)	179 mm (7 in)
288	Dielectric	12	24	24	249 kg/km (167 lb/1000 ft)	20.1 mm (0.79 in)	302 mm (11.9 in)	201 mm (7.9 in)

## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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## 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+® fiber	SMF-28e+® fiber	SMF-28e+® LL	SMF-28® Ultra**	ClearCurve® XB**
Fiber Category	G.652.D	G.652.D	G.652.D	G.652.D/G.657.A1	G.652.D/G.657.A1
Fiber Code	E	E	L	Z	H
Performance Option Code	01	00	22	22	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.4/0.4/0.3	0.35/0.35/0.25	0.34/0.34/0.22	0.34/0.34/0.22	0.4/0.4/0.3
Typical Attenuation* (dB/km)	0.33/0.33/0.19	0.33/0.33/0.19	0.32/0.32/0.18	0.32/0.32/0.18	0.35/0.35/0.20
Fiber Name	LEAF®	SMF-28® ULL			
Fiber Category	G.655	G.652			
Fiber Code	F	P			
Performance Option Code	01	19			
Wavelengths (nm)	1310/1383/1550	1310/1383/1550			
Maximum Attenuation (dB/km)	-/-/0.25	0.33/-/0.19			
Typical Attenuation* (dB/km)	-/-/0.19	0.31/-/0.17			

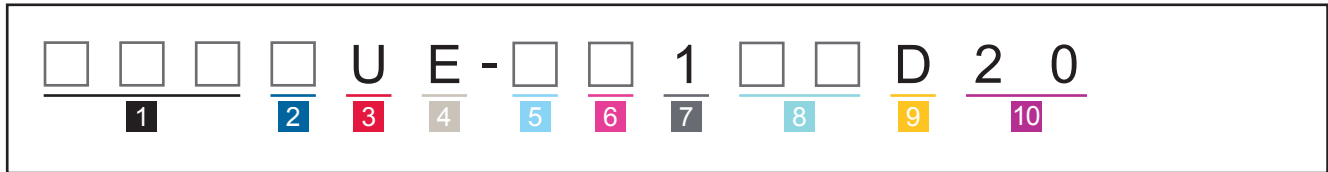
\* Typical attenuation values match the attenuation values listed in the optical fiber specifications. See [www.corning.com/opticalfiber](http://www.corning.com/opticalfiber) for Corning optical fiber specifications. Better attenuation performance options are available for some fiber and cable types. Contact Customer Care for additional fiber options.

\*\* SMF-28® Ultra and ClearCurve® XB fiber deliver 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.

# ALTOS® Gel-Free Double-Jacket, Dielectric Cables, 12-288 Fibers

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



**1** Select fiber count.

Standard offerings:  
012-288 (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) SMF-28e+® fiber  
L = Single-mode (G.652.D) SMF-28e+® LL fiber  
Z = Single-mode (G.652.D/G.657.A1) SMF-28® Ultra fiber  
H = Single-mode (G.652.D/G.657.A1) ClearCurve® XB fiber  
P = Single-mode (G.652) SMF-28® ULL fiber  
F = Single-mode (G.655) LEAF® fiber

**3** Defines cable type.

U = ALTOS® Loose Tube Cable with 2.5 mm buffer tubes

**4** Defines outer jacket.

E = Double-jacket, all-dielectric

**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 Dispersion-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.



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