

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

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## Features and Benefits

### Two jacket layers

Provides extra protection in harsh environments

### Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

### Innovative waterblocking design

Provides efficient and craft-friendly cable preparation

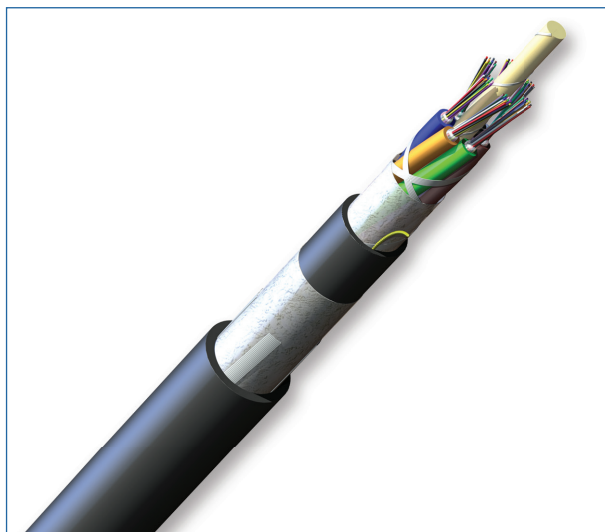
### Medium-density polyethylene jacket

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

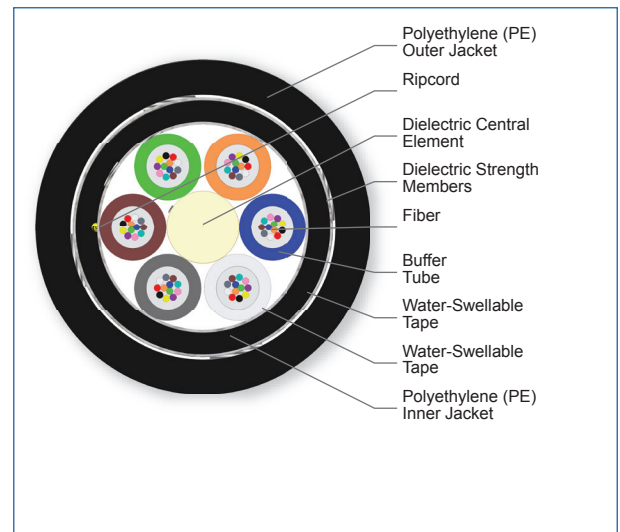
Corning ALTOS® double-jacket dielectric cables are designed for duct and aerial (lashed) installation. The double-jacket construction adds a layer of protection for harsh environments. The loose tube cable design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade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

## Standards

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



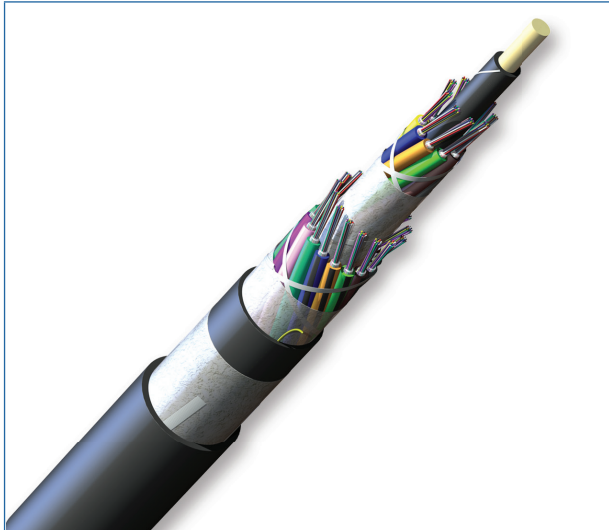
ALTOS Double-Jacket Dielectric Cables, 72 Fibers  
| Photo PIM1322



ALTOS Double-Jacket Dielectric Cables, 72 Fibers  
| Photo PIM2220

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



**ALTOS Double-Jacket Dielectric Cables, 288 Fibers**  
| Photo PIM1327



**ALTOS Double-Jacket Dielectric Cables, 288 Fibers**  
| Photo PIM2225

## 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	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	12	6	1 - 6	114 kg/km (76 lb/1000 ft)	12.5 mm (0.49 in)	188 mm (7.4 in)	125 mm (4.9 in)
96	12	8	8	146 kg/km (98 lb/1000 ft)	14.2 mm (0.56 in)	213 mm (8.4 in)	142 mm (5.6 in)
144	12	12	12	224 kg/km (150 lb/1000 ft)	17.7 mm (0.70 in)	213 mm (8.4 in)	142 mm (5.6 in)

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## Mechanical Characteristics Cable

Fiber Count	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	12	18	16 - 18	217 kg/km (146 lb/1000 ft)	17.9 mm (0.70 in)	269 mm (10.6 in)	179 mm (7.0 in)
288	12	24	24	279 kg/km (187 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+® 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](http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/LAN-1863-AEN.pdf)

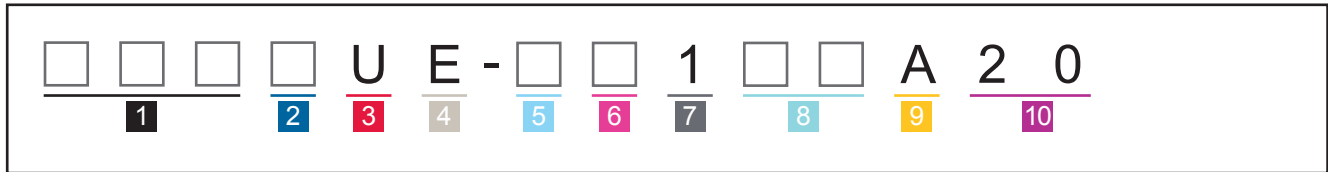
\*\* SMF-28® Ultra fiber delivers up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.

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



**1** 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)
- 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® Cable, Enhanced

**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.

A = Gel-filled cable

**10** Defines special manufacturing code.

20 = No special requirements



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