

ALTOS® All-Dielectric Cables, 12-432 Fibers, Enhanced

CORNING

Features and Benefits

Flexible, craft-friendly buffer tubes

Facilitate easy routing in closures

Innovative waterblocking design

Provides efficient and craft-friendly cable preparation

SZ-stranded, loose tube design

Isolates fibers from installation and environmental rigors and facilitates mid-span access

Dielectric central strength member

No preferential bend and requires no bonding or grounding

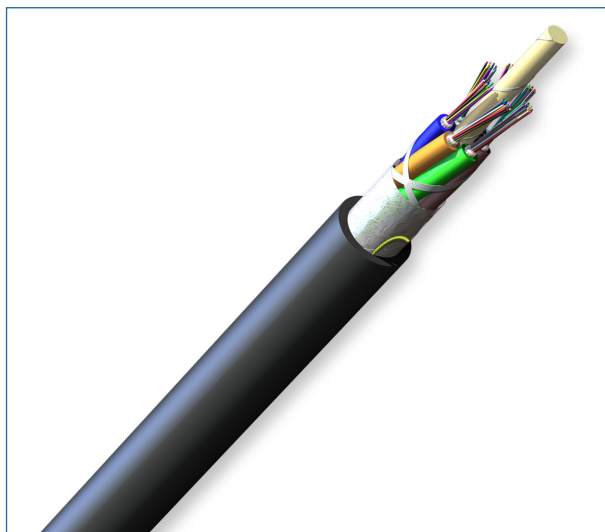
Medium-density polyethylene jacket

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

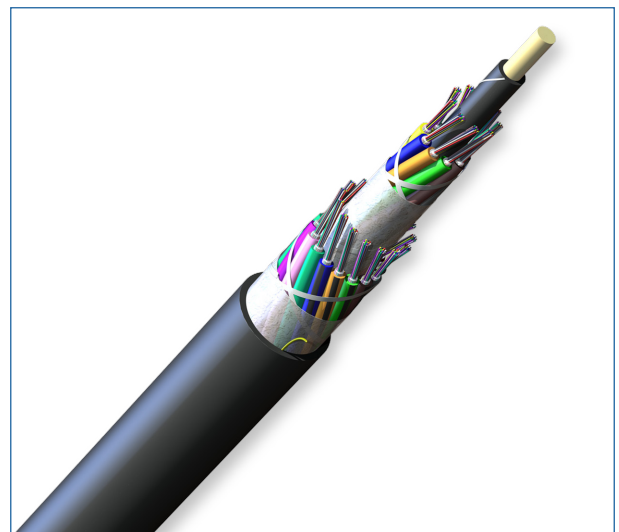
ALTOS® all-dielectric cables, enhanced are lightweight cables designed for duct and aerial (lashed) installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

Standards

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



ALTOS All-Dielectric Cables, 72 Fibers, Enhanced
| Photo PIM1288

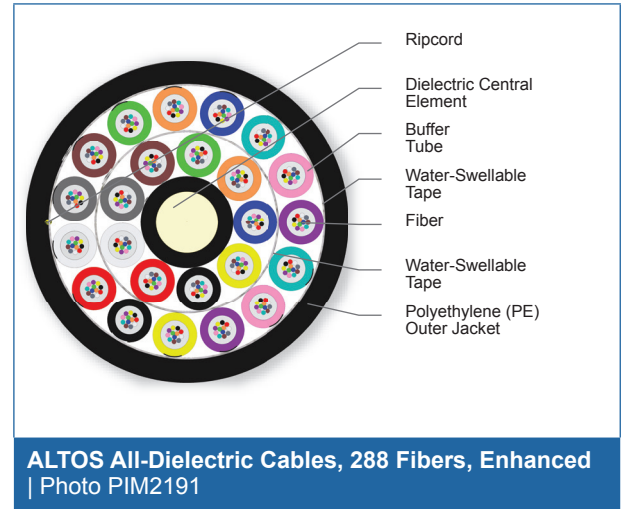
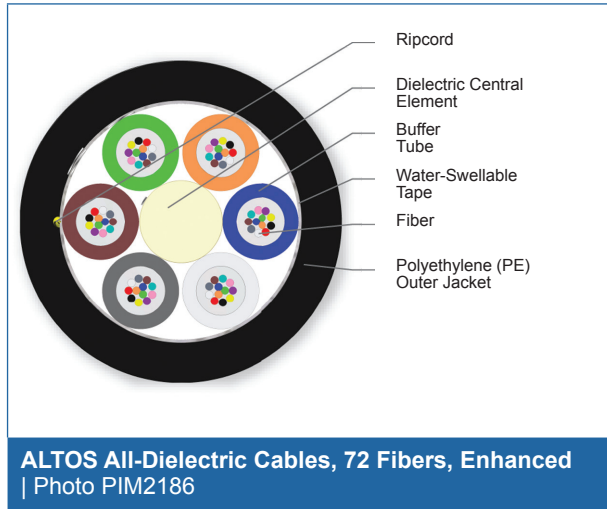


ALTOS All-Dielectric Cables, 288 Fibers, Enhanced
| Photo PIM1293

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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	80 kg/km (54 lb/1000 ft)	10.5 mm (0.41 in)	158 mm (6.2 in)	105 mm (4.1 in)
96	Dielectric	12	8	8	108 kg/km (72 lb/1000 ft)	12.2 mm (0.48 in)	183 mm (7.2 in)	122 mm (4.8 in)
144	Dielectric	12	12	12	177 kg/km (119 lb/1000 ft)	15.8 mm (0.62 in)	237 mm (9.3 in)	158 mm (6.2 in)
192 - 216	Dielectric	12	18	16 - 18	169 kg/km (113 lb/1000 ft)	16.0 mm (0.63 in)	240 mm (9.4 in)	160 mm (6.3 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
288	Dielectric	12	24	24	226 kg/km (152 lb/1000 ft)	18.2 mm (0.72 in)	273 mm (10.7 in)	182 mm (7.2 in)
360 - 432	Dielectric	12	36	30 - 36	288 kg/km (194 lb/1000 ft)	21.2 mm (0.83 in)	318 mm (12.5 in)	212 mm (8.3 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	00	01	22	22	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.35/0.35/0.25	0.4/0.4/0.3	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 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.

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

				U	4	-			1			A	2	0
1	2	3	4	5	6	7	8	9	10					

1 Select fiber count.

Standard offerings:
012-432 (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® Cable, Enhanced

4 Defines outer jacket.

4 = 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 ft (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 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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