

ALTOS® Loose Tube, Gel-Free Cable



Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. 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. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

Features and Benefits

Gel-free waterblocking technology

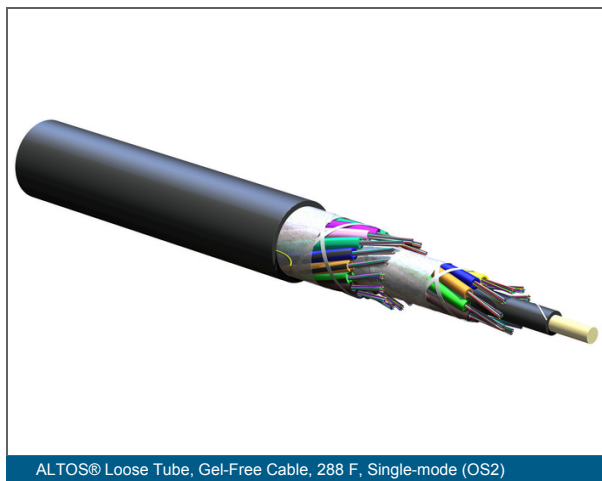
Craft-friendly cable preparation

Polyethylene jacket

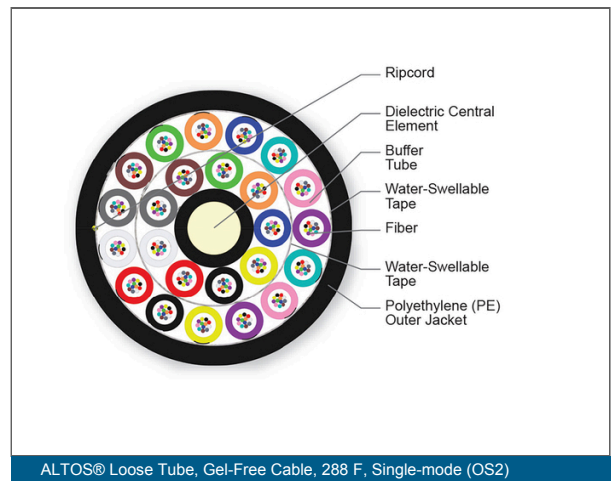
Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

All-dielectric construction

Requires no grounding or bonding

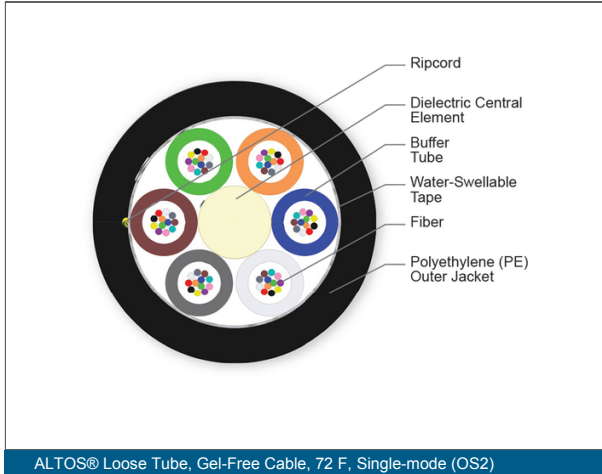


ALTOS® Loose Tube, Gel-Free Cable, 288 F, Single-mode (OS2)

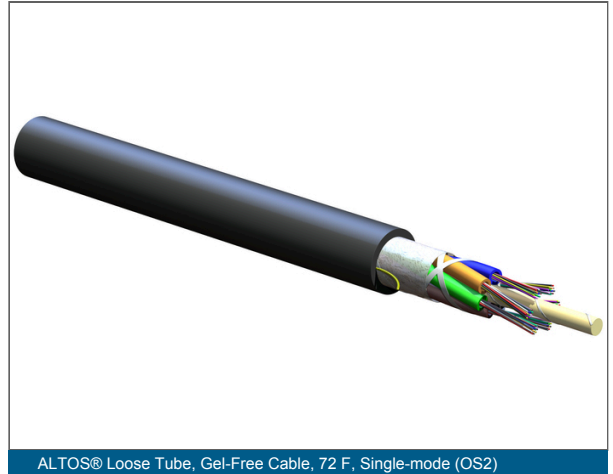


ALTOS® Loose Tube, Gel-Free Cable, 288 F, Single-mode (OS2)

ALTOS® Loose Tube, Gel-Free Cable



ALTOS® Loose Tube, Gel-Free Cable, 72 F, Single-mode (OS2)



ALTOS® Loose Tube, Gel-Free Cable, 72 F, Single-mode (OS2)

Standards

RoHS

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

Specifications

General Specifications

Environment	Outdoor
Product Type	Dielectric
Cable Type	Loose Tube

Temperature Range

Temperature Range, Storage	-40 °C - 70 °C (-40 °F - 158 °F)
Temperature Range, Installation	-30 °C - 70 °C (-22 °F - 158 °F)
Temperature Range, Operation	-40 °C - 70 °C (-40 °F - 158 °F)

Notes

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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Design Characteristics Cable

Fiber Count	Fibers per Tube	Number of Tube Positions	Number of Active Tubes	Buffer Tube Diameter
6	6	6	1	2.5 mm (0.1 in)
12 - 72	12	6	1 - 6	2.5 mm (0.1 in)
84 - 96	12	8	7 - 8	2.5 mm (0.1 in)
108 - 144	12	12	9 - 12	2.5 mm (0.1 in)
156 - 216	12	18	13 - 18	2.5 mm (0.1 in)
228 - 288	12	24	19 - 24	2.5 mm (0.1 in)
360 - 432	12	36	30 - 36	2.5 mm (0.1 in)

Mechanical Characteristics Cable

Fiber Count	Nominal Outer Diameter	Max. Tensile Strength, Short-Term	Max. Tensile Strength, Long-Term	Min. Bend Diameter Installation	Min. Bend Diameter Operation	Cable Weight
6 - 72	10.5 mm (0.41 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	316 mm (12.44 in)	210 mm (8.27 in)	73 kg/km (49.05 lb/1000 ft)
84 - 96	12.2 mm (0.48 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	366 mm (14.41 in)	244 mm (9.61 in)	98 kg/km (65.85 lb/1000 ft)
108 - 144	15.8 mm (0.62 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	474 mm (18.66 in)	316 mm (12.44 in)	162 kg/km (108.86 lb/1000 ft)
156 - 216	16 mm (0.63 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	480 mm (18.9 in)	320 mm (12.6 in)	147 kg/km (98.78 lb/1000 ft)
228 - 288	18.2 mm (0.72 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	546 mm (21.5 in)	364 mm (14.33 in)	196 kg/km (131.71 lb/1000 ft)
360 - 432	21.2 mm (0.83 in)	2700 N (606.98 lbf)	890 N (200.08 lbf)	636 mm (25.04 in)	424 mm (16.69 in)	241 kg/km (161.94 lb/1000 ft)

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Transmission Performance

Multimode				
Fiber Category	OM1	OM2	OM3	OM4
Fiber Code	K	T	T	T
Performance Option Code	30	31	80	90
Fiber Core Diameter	62.5 µm	50 µm	50 µm	50 µm
Wavelengths	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	300 m / 550 m	750 m / 600 m	1000 m / 600 m	1000 m / 600 m
Serial 10 Gigabit Ethernet	33 m / -	150 m / -	300 m / -	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km	700 MHz*km / 500 MHz*km	1500 MHz*km / - 500 MHz*km	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -		950 MHz*km / -	4700 MHz*km / -

Transmission Performance

Single-mode					
Fiber Name	LEAF®	SMF-28® ULL	Bend-Improved Single-mode (OS2)	Single-mode (OS2)	Single-mode (OS2)
Performance Option Code	01	19	22	00	01
Fiber Category	OS2	OS2	OS2	OS2	OS2
Wavelengths	1310 nm / 1383 nm / 1550 nm	1310 nm / 1383 nm / 1550 nm	1310 nm / 1383 nm / 1550 nm	1310 nm / 1383 nm / 1550 nm	1310 nm / 1383 nm / 1550 nm
Fiber Code	F	P	Z	E	E

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CORNING

Single-mode

Maximum Attenuation	- / - / 0.25 dB/km	0.33 dB/km / - / 0.19 dB/km	0.34 dB/km / 0.34 dB/km / 0.22 dB/km	0.35 dB/km / 0.35 dB/km / 0.25 dB/km	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
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1 Select fiber count.
006-288
360-432 (SMF-28® Ultra fiber only)

2 Select fiber code.
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2/OM3/OM4)
E = Single-mode (G.652.D)
Z = Single-mode (G.652.D/G.657.A1) SMF-28® Ultra fiber
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.
4 = 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 (TXF) (Max. attenuation -/-/0.20 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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