

ALTOS® Figure-8 Gel-Free Cables

A LANscape® Solutions Product

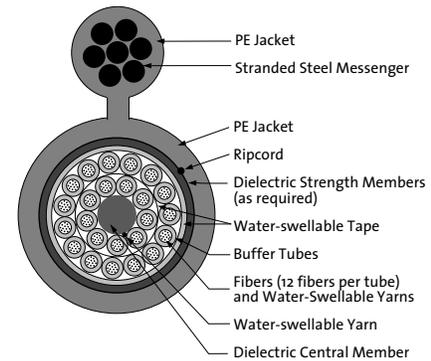
Corning
Cable Systems

Description

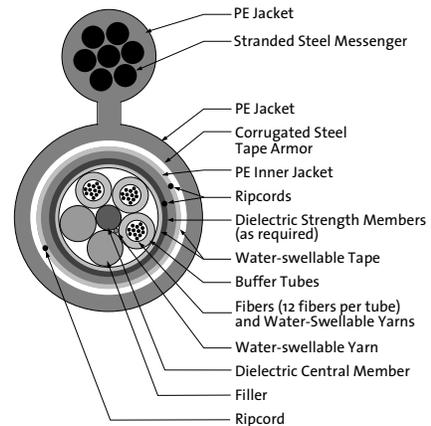
ALTOS® Figure-8 Gel-Free Cables are self-supporting aerial cables that are designed for easy and economical one-step installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

Features / Benefits

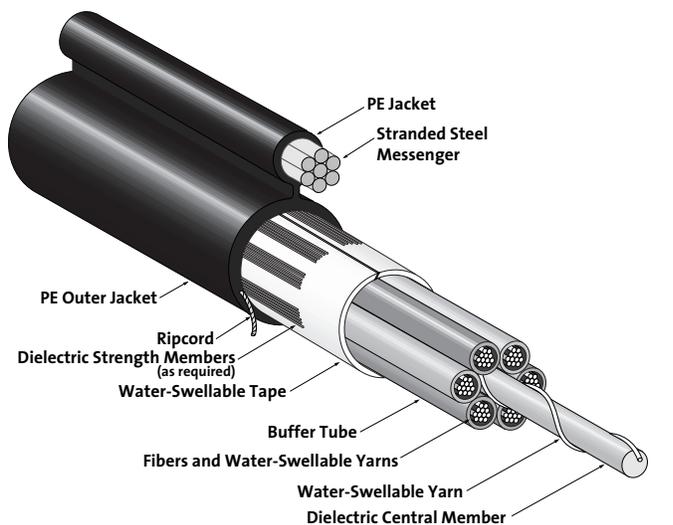
- Figure-8 cable design allows easy, one-step installation, using standard hardware and installation methods
- Gel-free design is fully waterblocked using craft-friendly water-swollable yarns and tapes, making cable access simple and requiring no clean-up
- Flexible, craft-friendly buffer tubes are easy to route in closures
- Standard buffer tube size reduces the number of access tools required by craftsperson
- S-Z stranded, loose tube design isolates fibers from installation and environmental rigors and facilitates mid-span access
- Medium Density PE jacket is rugged, durable and easy to strip



288-Fiber Single-Jacket Non-Armored Figure-8 ALTOS Cable
| Drawing ZA-2843



36-Fiber Double-Jacket Single-Armored Figure-8 ALTOS Cable
| Drawing ZA-2842



ALTOS Figure-8 Cable | Drawing ZA-2844



Specifications

Maximum Tensile Loads	Short-Term: See sag and tension information Long-Term: See sag and tension information
Temperatures	Storage: -40° to +70°C (-40° to +158°F) Installation: -30° to +70°C (-22° to +158°F) Operation: -40° to +70°C (-40° to +158°F)
Approvals and Listings	RUS 7 CFR 1755.900
Common Installations	Outdoor self-supporting aerial
Design and Test Criteria	ANSI/ICEA S-87-640

Corning Cable Systems recommends storing indoor/outdoor cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Fiber Count Range	Maximum Fibers per Tube	Number of Tube Positions	Number Active Tubes	Nominal Cable Weight (kg/km (lb/1000 ft))	Nominal Outer Diameter (mm (in))	Nominal Cable Height (mm (in))	Minimum Bend Radius Loaded (cm (in))	Minimum Bend Radius Installed (cm (in))
Figure-8 (Non-Armored)								
2-60	12	5	1-5	305 (205)	11.5 (0.45)	23.1 (0.91)	17.3 (6.8)	11.5 (4.5)
61-72	12	6	6	318 (214)	12.2 (0.48)	23.8 (0.94)	18.3 (7.2)	12.2 (4.8)
73-96	12	8	7-8	348 (234)	14.1 (0.56)	25.7 (1.01)	21.2 (8.3)	14.1 (5.6)
97-120	12	10	9-10	385 (258)	16.1 (0.63)	27.7 (1.09)	24.2 (9.5)	16.1 (6.3)
121-192	12	16	11-16	388 (261)	17.6 (0.69)	29.2 (1.15)	26.4 (10.4)	17.6 (6.9)
193-216	12	18	17-18	407 (273)	18.4 (0.72)	30.0 (1.18)	27.6 (10.9)	18.4 (7.2)
217-240	12	20	19-20	426 (286)	19.3 (0.76)	30.9 (1.21)	29.0 (11.4)	19.3 (7.6)
241-288	12	24	21-24	576 (319)	21.5 (0.85)	33.1 (1.30)	32.3 (12.7)	21.5 (8.5)
Figure-8 Armor								
2-60	12	5	1-5	423 (284)	15.8 (0.62)	27.4 (1.08)	23.7 (9.3)	15.8 (6.2)
61-72	12	6	6	441 (296)	16.3 (0.64)	27.9 (1.10)	24.5 (9.6)	16.3 (6.4)
73-96	12	8	7-8	485 (325)	18.3 (0.72)	29.9 (1.18)	27.5 (10.8)	18.3 (7.2)
97-120	12	10	9-10	538 (361)	20.2 (0.80)	31.8 (1.25)	30.3 (11.9)	20.2 (8.0)
121-192	12	16	11-16	555 (372)	21.8 (0.86)	33.4 (1.31)	32.7 (12.9)	21.8 (8.6)
193-216	12	18	17-18	578 (388)	22.5 (0.89)	34.1 (1.34)	33.8 (13.3)	22.5 (8.9)
217-240	12	20	19-20	605 (406)	23.4 (0.92)	35.0 (1.38)	35.1 (13.8)	23.4 (9.2)
241-288	12	24	21-24	679 (456)	26.1 (1.03)	37.7 (1.48)	39.2 (15.4)	26.1 (10.3)

Specifications (continued)

Maximum Span with One Percent Installation Sag

Number Tube Positions	NESC Light m (ft)	NESC Medium m (ft)	NESC Heavy m (ft)	Number Tube Positions	NESC Light m (ft)	NESC Medium m (ft)	NESC Heavy m (ft)
Figure-8 (Non-Armored)				Figure-8 Armor			
5	232 (760)	227 (745)	168 (550)	5	187 (615)	186 (610)	142 (465)
6	229 (750)	226 (740)	166 (545)	6	183 (600)	181 (595)	139 (455)
8	186 (610)	186 (610)	137 (450)	8	149 (490)	149 (490)	114 (375)
10	180 (590)	180 (590)	134 (440)	10	143 (470)	143 (470)	111 (365)
16	197 (645)	200 (655)	149 (490)	16	155 (510)	157 (515)	123 (405)
18	183 (600)	186 (610)	139 (455)	18	145 (475)	146 (480)	114 (375)
20	148 (485)	151 (495)	113 (370)	20	119 (390)	120 (395)	93 (305)
24	166 (545)	169 (555)	130 (425)	24	131 (430)	131 (430)	105 (345)

Transmission Performance

Fiber Code	K	C	S	S	E
Performance Option Code	30	31	80	90	01
Fiber Type	62.5/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	50/125 μm (850/1300 nm)	Single-mode (1310/1383/1550 nm)
Maximum Attenuation (dB/km)	3.5/1.0	3.5/1.5	3.0/1.5	3.0/1.5	0.4/0.4/0.3
Minimum LED Bandwidth (MHz•km)	200/500	500/500	1500/500	1500/500	- / - / -
Minimum Effective Modal Bandwidth (MHz•km)	*220/ -	*510/ -	**2000/ -	***4700/ -	- / - / -
Serial Gigabit Ethernet Distance (m)	300/550	600/600	1000/600	1000/600	5000/ - / -
Serial 10 Gigabit Ethernet Distance (m)	33/ -	82/ -	300/ -	****550/ -	10000/40000

* As predicted by RML BW, per TIA/EIA 455-204 and IEC 60793-1-41, for intermediate performance laser-based systems (up to 1 Gb/s).

** As predicted by minEMBC, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).

*** As predicted by minEMBC, per TIA/EIA 455-220 and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).

**** The 550 m distance is equivalent to a 4700 EMB system with standards-compliant transceiver and fiber characteristics, 3.0 dB/km cable attenuation and 1.0 dB total connector loss.

Ordering Information

□ □ □ □ W □ - T 4 1 □ □ D 2 0
1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 - 3 Select fiber count.

002 to 288

4 Select fiber code (see Transmission Performance Table).

5 / 12 Defines cable type.

W/D = ALTOS® Gel-Free Cable

6 Defines outer jacket.

A = Non-armored
 B = Armored

7 Defines fiber placement.

T = 12 fibers per tube

8 Defines length markings.

4 = Markings in feet (standard)

9 Defines tensile strength (see Specifications).

10 - 11 Select performance option code
 (see Transmission Performance Table).

13 - 14 Defines special requirements.

20 = No special requirements

Note: Use with Buffer Tube Fan-Out Kit for direct termination applications.

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