

Flex-Span® ADSS Fiber Optic Cable

AFL Flex-Span All-Dielectric Self-Supporting (ADSS) cable is designed for aerial distribution power lines, as well as underground duct applications. As its name indicates, there are no metallic components and the cable does not require a support or messenger wire. Flex-Span ADSS cables are a single jacket design intended for the shorter pole-to-pole span lengths in a distribution environment. A broad combination of fiber counts and spans lengths in this product family provide network designers with flexibility in their cable selection.

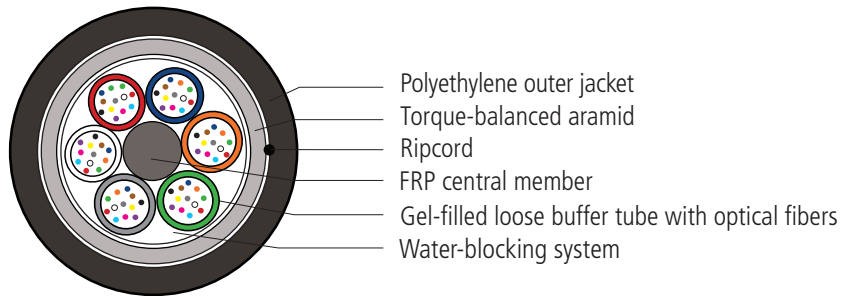
Features

- Gel-filled tubes are reverse-oscillated to allow slack for mid-span access
- Up to 288 fibers in cable
- Pole-to-pole span lengths up to 1100 feet
- Single jacket design decreases the diameter and weight when compared to double jacket ADSS cable; thus reducing pole loading
- No separation requirement of ADSS from conductors per National Electric Safety Code (NEC) section 235

Applications

- Electric utility distribution power lines
 - Framed in supply or communications space
- Underground duct
- Enterprise OSP networks
- Fiber-to-the-X networks

Cable Components (Representative)



Optical Information

FIBER TYPE	MAXIMUM ATTENUATION (dB/km)				OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		GIGABIT ETHERNET MINIMUM LINK DISTANCE (meters)	
	850 nm	1300 nm	1310 nm	1550 nm	850 nm	1300 nm	850 nm	1300 nm
(9) Single-mode	N/A	N/A	0.35	0.25	N/A	N/A	N/A	5000
(6) 62.5/125 GIGA-Link™ 300	3.5	1.2	N/A	N/A	200	600	300	550
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50 Laser-Link™ 300	2.9	0.9	N/A	N/A	1500	500	900	550

Gigabit Ethernet Minimum Link Distances are based on "bandwidth"/modal dispersion constraints. Actual link distances may be constrained by attenuation, depending on specific loss budget.

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Reel Information

ITEM	REEL A		REEL B		REEL C		REEL D		REEL E	
	inches	cm	inches	cm	inches	cm	inches	cm	inches	cm
Reel Height	42	106.7	58	147.3	66	167.6	72	167.6	84	213.4
Reel Width Outside	36	91.4	38	96.5	42	106.7	42	106.7	40	101.6
Reel Width Inside	32	81.6	32	81.3	36	91.4	36	91.4	34	86.4
Drum Diameter	23	58.7	28	71.1	36	91.4	36	91.4	35	88.9
Arbor Hole Diameter	3	7.9	3	7.9	3	7.9	3	7.9	3	7.9
Reel Weight with Lagging	180 lbs	82 kg	420 lbs	191 kg	685 lbs	311 kg	710 lbs	311 kg	950 lbs	431 kg

AFL provides ADSS cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request.

Typical Maximum Lengths

CABLE DIAMETER	REEL CAPACITY	
	feet	meters
< 0.85" (21.6 mm)	23,000	7,000

NOTE: Longer lengths may be available upon request.

Recommended Products for ADSS Fiber Optic Cable

DESCRIPTION	AFL NO.
Fiber Optic Cable Accessories	
ADSS Formed Wire Deadends	Refer to the ADSS Formed Wire Deadends spec sheet for specific AFL No.
ADSS Suspension Unit	Refer to the ADSS Suspension Unit spec sheet for specific AFL No.
ADSS Trunnion Assemblies	Refer to the ADSS Trunnion Assemblies spec sheet for specific AFL No.
ADSS Temporary Grip	Refer to the ADSS Temporary Grip spec sheet for specific AFL No.
AGC Downlead Clamp for ADSS	Refer to the AGC Downlead Clamp for ADSS spec sheet for specific AFL No.
AVD Series Spiral Vibration Dampers	Refer to the AVD Series Spiral Vibration Dampers spec sheet for specific AFL No.
Coil Brackets	Refer to the Coil Brackets spec sheet for specific AFL No.

Temperature Specifications

TEMPERATURE RANGE	
Operation	-40°C to +70°C
Storage	-50°C to +70°C
Installation	-30°C to +70°C

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
IEEE	1222	Cable
TIA	598-D	Fiber

Contact AFL for your customized ADSS solution.

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Fiber Optic Cable

Flex-Span® ADSS Fiber Optic Cable

NESC LIGHT @ 1.5% INSTALLATION SAG				
SPAN (ft)	AFL NO.	WEIGHT (lbs/ft)	DIAMETER (inches)	MRCL (lbs)
48 FIBERS				
700	AE048★W520AA4	0.049	0.382	698
1050	AE048★W520EA3	0.052	0.390	1089
72 FIBERS				
700	AE072★O620A08	0.080	0.484	913
1050	AE072★O620EA1	0.083	0.492	1338
96 FIBERS				
700	AE096★O620A08	0.082	0.484	913
1050	AE096★O620EA1	0.085	0.492	1338
144 FIBERS				
700	AE144★O620A08	0.085	0.484	913
1050	AE144★O620EA1	0.087	0.492	1338
288 FIBERS				
700	AE288★OC20EA0	0.185	0.732	1594
800	AE288★OC20EA3	0.187	0.736	1780

NESC MEDIUM @ 1.5% INSTALLATION SAG				
SPAN (ft)	AFL NO.	WEIGHT (lbs/ft)	DIAMETER (inches)	MRCL (lbs)
48 FIBERS				
500	AE048★W520AA4	0.049	0.382	698
700	AE048★W520EA3	0.052	0.390	1089
72 FIBERS				
500	AE072★O620A08	0.080	0.484	913
700	AE072★O620EA1	0.083	0.492	1338
96 FIBERS				
500	AE096★O620A08	0.082	0.484	913
700	AE096★O620EA1	0.085	0.492	1338
144 FIBERS				
500	AE144★O620A08	0.085	0.484	913
700	AE144★O620EA1	0.087	0.492	1338
288 FIBERS				
500	AE288★OC20EA0	0.185	0.732	1594
700	AE288★OC20EA3	0.187	0.736	1780

NESC HEAVY @ 1.5% INSTALLATION SAG				
SPAN (ft)	AFL NO.	WEIGHT (lbs/ft)	DIAMETER (inches)	MRCL (lbs)
48 FIBERS				
300	AE048★W520AA4	0.049	0.382	698
450	AE048★W520EA3	0.052	0.390	1089
72 FIBERS				
300	AE072★O620A08	0.080	0.484	913
450	AE072★O620EA1	0.083	0.492	1338
96 FIBERS				
300	AE096★O620A08	0.082	0.484	913
450	AE096★O620EA1	0.085	0.492	1338
144 FIBERS				
300	AE144★O620A08	0.085	0.484	913
450	AE144★O620EA1	0.087	0.492	1338
288 FIBERS				
300	AE288★OC20EA0	0.185	0.732	1594
450	AE288★OC20EA3	0.187	0.736	1780

NOTE: Diameter and weight subject to change without notice.

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

9 = Single-mode

5 = 50/125 μm multimode GIGA-Link™ 600

6 = 62.5/125 μm multimode GIGA-Link™ 300

L = 50/125 μm multimode Laser-Link™ 300