

Flex-Span® ADSS Fiber Optic Cable

Flex-Span ADSS expands on AFL's single jacket ADSS portfolio. Flex-Span designs are optimized for a broader combination of fiber counts and span lengths, providing ADSS system designers more flexibility in their product selection. As its name indicates, there is no support or messenger wire required, so installation is achieved in a single pass.

Flex-Span ADSS includes fiber counts up to 144 optical fibers and any type or combination of single-mode or multimode fibers within the cable. Pole-to-pole span lengths range from 50 ft. to over 1,000 ft.

Features

- Suitable for use on distribution lines
- Gel-filled buffer tubes are S-Z stranded for easy mid-span access
- Cable is water-blocked using dry core technology, therefore no messy flooding compounds
- Design details listed below for span lengths up to 1100 ft (457 m) and fiber counts up to 144
- Requires the use of formed wire dead ends

Temperature Range

Operating: -40°C to +70°C

Storage: -50°C to +70°C

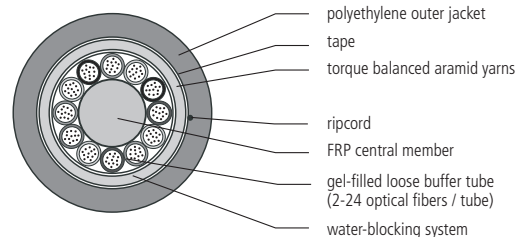
Installation: -30°C to +70°C

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.

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
(6) 62.5/125 GIGA-Link™ 300	3.5	1.2	N/A	N/A	200	600	300	550
(8) 62.5/125 GIGA-Link™ 1000	3.5	1.2	N/A	N/A	350	600	500	1000
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(7) 50/125 GIGA-Link™ 2000	2.9	0.9	N/A	N/A	500	800	750	2000
(L) 50 Laser-Link™ 300	2.9	0.9	N/A	N/A	1500	500	900	550
(9) Single-mode	N/A	N/A	0.35	0.25	N/A	N/A	N/A	5000
(Q) Non-zero Dispersion-shifted Single-mode	N/A	N/A	N/A	0.25	N/A	N/A	N/A	N/A
(K) SM Futureguide SR-15e Bend Insensitive	N/A	N/A	0.35	0.25	N/A	N/A	N/A	5000

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.

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.

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NESC LIGHT @ 1.5% INSTALLATION SAG													
SPAN		AFL NO.	WEIGHT		DIAMETER		MRCL		INITIAL TENSION ¹				
									UNLOADED		LOADED		
FEET	METERS		LBS/FT	KG/KM	INCHES	MM	LBS	N	LBS	N	SAG %	LBS	N
12 FIBERS													
525	160	AE012★C520A08	0.057	84	0.425	10.8	539	2398	248	1104	0.8	521	2318
600	183	AE012★C520AA0	0.057	84	0.425	10.8	598	2661	284	1264	0.8	592	2634
700	213	AE012★C520AA5	0.057	84	0.425	10.8	746	3320	333	1482	0.8	702	3124
800	244	AE012★C520E08	0.059	88	0.433	11	809	3600	395	1758	0.8	807	3591
925	282	AE012★C520EA1	0.059	88	0.433	11	999	4445	457	2034	0.8	947	4214
1050	320	AE012★C520EA2	0.059	88	0.433	11	1062	4726	519	2309	0.8	1059	4712
1100	335	AE012★C520EA4	0.059	88	0.433	11	1189	5291	544	2421	0.8	1127	5015
24 FIBERS													
525	160	AE024★C520A08	0.058	86	0.425	10.8	539	2398	252	1121	0.8	523	2327
600	183	AE024★C520AA0	0.058	86	0.425	10.8	598	2661	289	1286	0.8	594	2643
700	213	AE024★C520AA5	0.058	86	0.425	10.8	746	3320	338	1504	0.8	705	3137
800	244	AE024★C520EA0	0.06	90	0.433	11	936	4165	402	1789	0.8	838	3729
925	282	AE024★C520EA1	0.06	90	0.433	11	999	4445	464	2065	0.8	951	4232
1010	308	AE024★C520EA2	0.06	90	0.433	11	1062	4726	507	2256	0.8	1032	4592
1100	335	AE024★C520EA4	0.06	90	0.433	11	1189	5291	553	2461	0.8	1131	5033
48 FIBERS													
525	160	AE048★C520A08	0.06	89	0.425	10.8	539	2398	261	1161	0.9	528	2350
600	183	AE048★C520AA1	0.06	89	0.425	10.8	628	2794	298	1326	0.9	606	2697
700	213	AE048★C520AA5	0.06	89	0.425	10.8	746	3320	349	1553	0.8	711	3164
800	244	AE048★C520EA0	0.062	93	0.433	11	936	4165	414	1842	0.8	845	3760
925	282	AE048★C520EA1	0.062	93	0.433	11	999	4445	479	2131	0.9	958	4263
1030	314	AE048★C520EA2	0.062	93	0.433	11	1062	4726	534	2376	0.9	1056	4699
1100	335	AE048★C520EA4	0.062	93	0.433	11	1189	5291	570	2536	0.9	1140	5073
72 FIBERS													
725	221	AE072★C620A08	0.075	112	0.465	11.8	854	3800	454	2020	0.9	832	3702
800	244	AE072★C620AA0	0.075	112	0.465	11.8	913	4063	501	2229	0.9	911	4054
875	267	AE072★C620AA3	0.075	112	0.465	11.8	1002	4459	548	2438	0.9	998	4441
975	297	AE072★C620AA7	0.075	112	0.465	11.8	1120	4984	611	2719	0.9	1113	4953
1075	328	AE072★C620EA0	0.075	112	0.465	11.8	1250	5562	674	2999	0.9	1230	5473
96 FIBERS													
925	282	AE096★C820A08	0.1	148	0.528	13.4	1296	5767	769	3422	1	1270	5651
1000	305	AE096★C820AA1	0.1	149	0.528	13.4	1384	6159	832	3702	1	1370	6096
144 FIBERS													
725	221	AE144★O620A08	0.085	126	0.484	12.3	913	4061	512	2278	1.0	906	4031
850	259	AE144★O620AA4	0.086	128	0.488	12.4	1077	4787	609	2709	1.0	1072	4770
1050	320	AE144★O620EA1	0.087	130	0.492	12.5	1338	5954	764	3399	1.0	1337	5948

¹ Initial tension indicates tension before 10 year creep.

Note: Diameter and weight subject to change without notice

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

- 5 = 50/125 µm multimode GIGA-Link™ 600
- 7 = 50/125 µm multimode GIGA-Link™ 2000
- 6 = 62.5/125 µm multimode GIGA-Link™ 300
- 8 = 62.5/125 µm multimode GIGA-Link™ 1000
- L = 50/125 µm multimode Laser-Link™ 300
- 9 = Single-mode
- K = SM Futureguide SR-15e Bend Insensitive
- Q = Non-zero dispersion-shifted single-mode

Flex-Span® ADSS Fiber Optic Cable

NESC MEDIUM @ 1.5% INSTALLATION SAG														
SPAN		AFL NO.	WEIGHT		DIAMETER		MRCL		INITIAL TENSION ¹					
			LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED			
FEET	METERS									LBS	N	SAG %	LBS	N
12 FIBERS														
375	114	AE012★C520A08	0.057	84	0.425	10.8	539	2398	178	792	3.5	532	2367	
400	122	AE012★C520AA0	0.057	84	0.425	10.8	598	2661	189	841	3.5	573	2550	
500	152	AE012★C520AA5	0.057	84	0.425	10.8	746	3320	238	1059	3.5	717	3191	
550	168	AE012★C520E08	0.059	88	0.433	11	809	3600	272	1210	3.5	793	3529	
650	198	AE012★C520EA1	0.059	88	0.433	11	999	4445	321	1428	3.4	949	4223	
700	213	AE012★C520EA2	0.059	88	0.433	11	1062	4726	346	1540	3.5	1018	4530	
800	244	AE012★C520EA4	0.059	88	0.433	11	1189	5291	396	1762	3.5	1157	5148	
24 FIBERS														
375	114	AE024★C520A08	0.058	86	0.425	10.8	539	2398	181	805	3.5	533	2372	
400	122	AE024★C520AA0	0.058	86	0.425	10.8	598	2661	192	854	3.5	575	2559	
500	152	AE024★C520AA5	0.058	86	0.425	10.8	746	3320	242	1077	3.5	719	3199	
625	190	AE024★C520EA0	0.06	90	0.433	11	936	4165	314	1397	3.5	908	4040	
650	198	AE024★C520EA1	0.06	90	0.433	11	999	4445	326	1451	3.4	951	4232	
700	213	AE024★C520EA2	0.06	90	0.433	11	1062	4726	352	1566	3.5	1021	4543	
800	244	AE024★C520EA4	0.06	90	0.433	11	1189	5291	402	1789	3.5	1160	5162	
48 FIBERS														
375	114	AE048★C520A08	0.06	89	0.425	10.8	539	2398	187	832	3.5	536	2385	
425	130	AE048★C520AA1	0.06	89	0.425	10.8	628	2794	211	939	3.5	612	2723	
500	152	AE048★C520AA5	0.06	89	0.425	10.8	746	3320	250	1112	3.5	723	3217	
625	190	AE048★C520EA0	0.062	93	0.433	11	936	4165	324	1442	3.5	913	4063	
650	198	AE048★C520EA1	0.062	93	0.433	11	999	4445	337	1500	3.4	957	4258	
700	213	AE048★C520EA2	0.062	93	0.433	11	1062	4726	363	1615	3.5	1027	4570	
800	244	AE048★C520EA4	0.062	93	0.433	11	1189	5291	415	1847	3.5	1167	5193	
72 FIBERS														
525	160	AE072★C620A08	0.075	112	0.465	11.8	854	3800	328	1460	3.4	825	3671	
575	175	AE072★C620AA0	0.075	112	0.465	11.8	913	4063	360	1602	3.4	899	4000	
625	190	AE072★C620AA3	0.075	112	0.465	11.8	1002	4459	391	1740	3.4	979	4356	
710	216	AE072★C620AA7	0.075	112	0.465	11.8	1120	4984	445	1980	3.5	1108	4930	
800	244	AE072★C620EA0	0.075	112	0.465	11.8	1250	5562	501	2229	3.5	1245	5540	
96 FIBERS														
725	221	AE096★C820A08	0.1	148	0.528	13.4	1296	5767	603	2683	3.4	1282	5705	
775	236	AE096★C820AA1	0.1	149	0.528	13.4	1384	6159	645	2870	3.4	1370	6096	
144 FIBERS														
525	160	AE144★O620A08	0.085	126	0.484	12.3	913	4061	370	1646	3.3	887	3947	
625	190	AE144★O620AA4	0.086	128	0.488	12.4	1077	4787	448	1993	3.3	1059	4711	
775	236	AE144★O620EA1	0.087	130	0.492	12.5	1338	5954	564	2509	3.3	1321	5878	

M E D I U M

¹ Initial tension indicates tension before 10 year creep.

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- 7 = 50/125 µm multimode GIGA-Link™ 2000
- 6 = 62.5/125 µm multimode GIGA-Link™ 300
- 8 = 62.5/125 µm multimode GIGA-Link™ 1000
- L = 50/125 µm multimode Laser-Link™ 300
- 9 = Single-mode
- K = SM Futureguide SR-15e Bend Insensitive
- Q = Non-zero dispersion-shifted single-mode

Flex-Span® ADSS Fiber Optic Cable

NESG HEAVY @ 1.5% INSTALLATION SAG													
SPAN		AFL NO.	WEIGHT		DIAMETER		MRCL		INITIAL TENSION ¹				
									UNLOADED		LOADED		
FEET	METERS		LBS/FT	KG/KM	INCHES	MM	LBS	N	LBS	N	SAG %	LBS	N
12 FIBERS													
200	61	AE012★C520A08	0.057	84	0.425	10.8	539	2398	95	423	4.5	485	2158
250	76	AE012★C520AA0	0.057	84	0.425	10.8	598	2661	118	525	4.6	585	2603
300	91	AE012★C520AA5	0.057	84	0.425	10.8	746	3320	143	636	4.6	710	3159
325	99	AE012★C520E08	0.059	88	0.433	11	809	3600	160	712	4.6	775	3449
400	122	AE012★C520EA1	0.059	88	0.433	11	999	4445	198	881	4.6	955	4250
450	137	AE012★C520EA2	0.059	88	0.433	11	1062	4726	222	988	4.7	1057	4703
500	152	AE012★C520EA4	0.059	88	0.433	11	1189	5291	247	1099	4.7	1177	5237
24 FIBERS													
200	61	AE024★C520A08	0.058	86	0.425	10.8	539	2398	96	427	4.5	485	2158
250	76	AE024★C520AA0	0.058	86	0.425	10.8	598	2661	120	534	4.6	586	2608
300	91	AE024★C520AA5	0.058	86	0.425	10.8	746	3320	145	645	4.6	712	3168
375	114	AE024★C520EA0	0.06	90	0.433	11	936	4165	188	837	4.6	897	3991
400	122	AE024★C520EA1	0.06	90	0.433	11	999	4445	201	894	4.6	957	4258
450	137	AE024★C520EA2	0.06	90	0.433	11	1062	4726	219	975	4.7	1054	4690
500	152	AE024★C520EA4	0.06	90	0.433	11	1189	5291	251	1117	4.7	1179	5246
48 FIBERS													
200	61	AE048★C520A08	0.06	89	0.425	10.8	539	2398	99	441	4.5	487	2167
250	76	AE048★C520AA1	0.06	89	0.425	10.8	628	2794	124	552	4.6	596	2652
300	91	AE048★C520AA5	0.06	89	0.425	10.8	746	3320	150	667	4.6	714	3177
375	114	AE048★C520EA0	0.062	93	0.433	11	936	4165	194	863	4.6	900	4005
400	122	AE048★C520EA1	0.062	93	0.433	11	999	4445	207	921	4.6	960	4272
450	137	AE048★C520EA2	0.062	93	0.433	11	1062	4726	233	1037	4.7	1062	4726
500	152	AE048★C520EA4	0.062	93	0.433	11	1189	5291	259	1153	4.7	1183	5264
72 FIBERS													
300	91	AE072★C620A08	0.075	112	0.465	11.8	854	3800	188	837	4.4	774	3444
350	107	AE072★C620AA0	0.075	112	0.465	11.8	913	4063	219	975	4.6	880	3916
400	122	AE072★C620AA3	0.075	112	0.465	11.8	1002	4459	250	1112	4.6	995	4428
450	137	AE072★C620AA7	0.075	112	0.465	11.8	1120	4984	282	1255	4.6	1117	4970
500	152	AE072★C620EA0	0.075	112	0.465	11.8	1250	5562	313	1393	4.6	1243	5531
96 FIBERS													
400	122	AE096★C820A08	0.1	148	0.528	13.4	1296	5767	333	1482	4.3	1140	5073
500	152	AE096★C820AA1	0.1	149	0.528	13.4	1384	6159	416	1851	4.5	1364	6070
144 FIBERS													
300	91	AE144★O620A08	0.085	126	0.484	12.3	913	4061	212	943	4.3	826	3675
400	122	AE144★O620AA4	0.086	128	0.488	12.4	1077	4787	287	1277	4.4	1067	4748
500	152	AE144★O620EA1	0.087	130	0.492	12.5	1338	5954	364	1619	4.4	1336	5944

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- 6 = 62.5/125 µm multimode GIGA-Link™ 300
- 8 = 62.5/125 µm multimode GIGA-Link™ 1000
- L = 50/125 µm multimode Laser-Link™ 300
- 9 = Single-mode
- K = SM Futureguide SR-15e Bend Insensitive
- Q = Non-zero dispersion-shifted single-mode