



AERIAL FIBER OPTIC CABLE

Optical Ground Wire | AFL-ADSS® | Loose Tube | SkyWrap®

Founded in 1984, AFL is an international manufacturer providing end-to-end solutions to the energy, service provider, enterprise and industrial markets as well as several emerging markets.

AFL's products are in use in over 130 countries and include fiber optic cable and hardware, transmission and substation accessories, outside plant equipment, connectivity, test and inspection equipment, fusion splicers and training.

AFL also offers a wide variety of services supporting data center, enterprise, wireless and outside plant applications.

AFL is dedicated to bringing our customers a quality product as well as delivering superior value.



1-800-235-3423 | 1-864-433-0333 | www.AFLglobal.com

Table of Contents

AFL Aerial Cable Solutions Overview 2

Optical Ground Wire (OPGW)

AlumaCore OPGW 4
CentraCore OPGW 5
HexaCore OPGW 6
Metallic Aerial Self-Supporting Cable (MASS) 7
Optical Phase Conductor 8
26 kV Isolator Kit for OPGW 9
Renewables Optimized OPGW 10

All-Dielectric Self Supporting (AFL-ADSS®)

Aerial Drop Cable 11
Mini-Span® ADSS Cable 12
Flex-Span® ADSS Fiber Optic Cable 18
All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable 22

Loose Tube

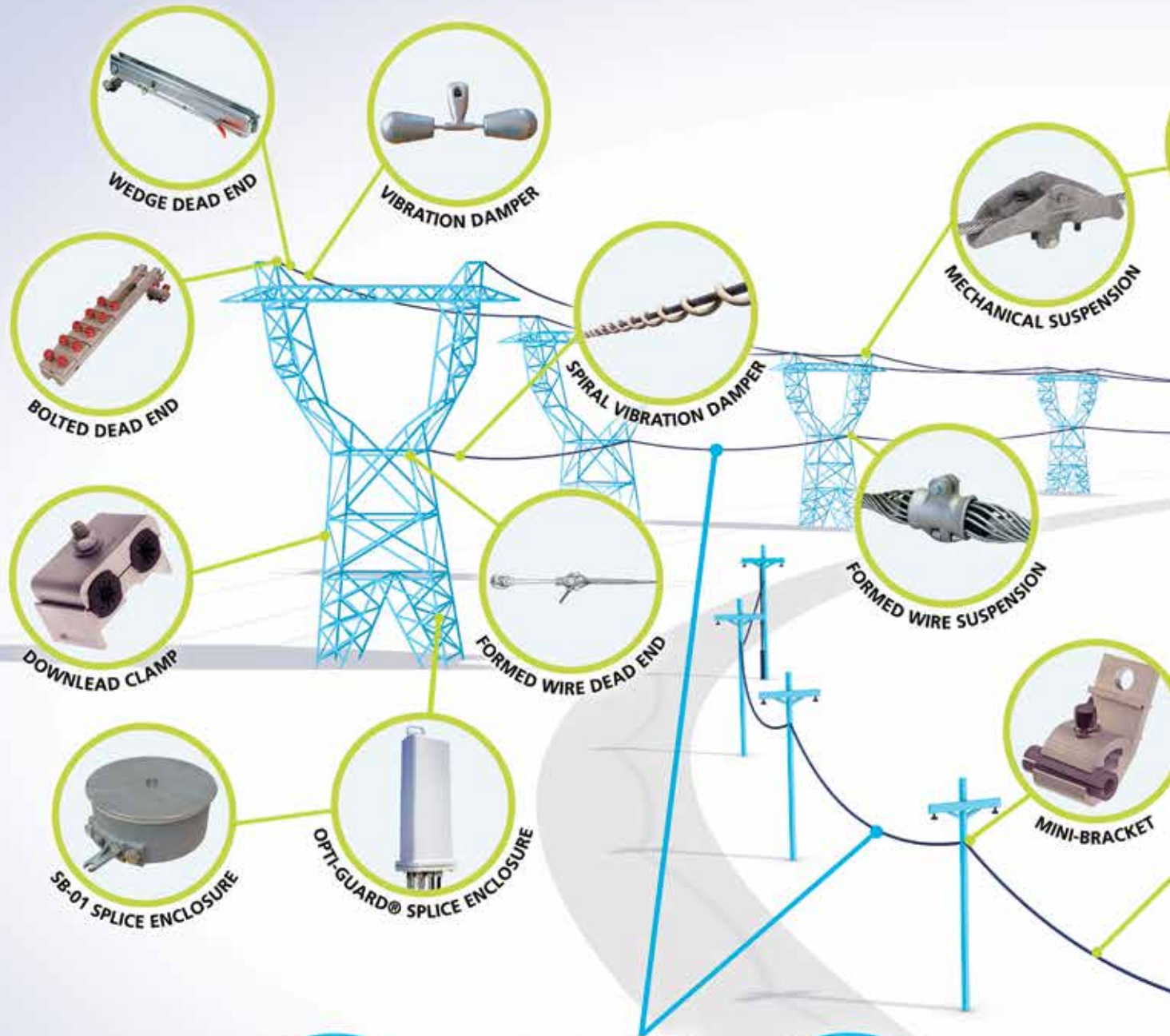
Non-Armored OSP Loose Tube (LE Series SJ) 39
Non-Armored Loose Tube Cable—Double Jacket (LE Series DJ) 41
Single-Jacket Single-Armor OSP Loose Tube (LE Series SASJ) 43
Double-Jacket Single-Armor OSP Loose Tube (LE Series SADJ) 45
All-Dielectric Armored Rodent-Resistant OSP Loose Tube
(LN Series) 47
Non-Armored Single Jacket Dry Loose Tube Cable 49
Armored Single Jacket/Single Armor Dry Loose Tube Cable 51
Riser Single-Jacket I/O Loose Tube (LV Series SJ) 53
Specialized Loose Tube Cables 55
Outside Plant (OSP) MicroCore® Blown Fiber Optic Cable 56

Reel and Packaging Information 57

Wrap Solutions

SkyWrap® 58
AccessWrap™ 60

AFL Aerial Cable Solutions



ADSS



AFL offers a systems solution for your demanding aerial applications. From a variety of cable design options to the accessories required for the cable, AFL offers the industry's widest array of solutions.



SKYWRAP®

OPGW



ACCESSWRAP™



*PLUS OTHER STAINLESS STEEL VARIANTS





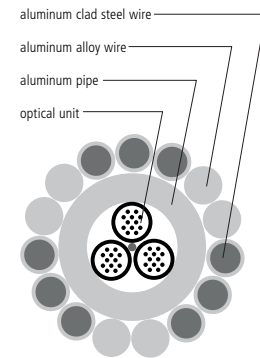
AlumaCore OPGW

AlumaCore Optical Ground Wire is preferred for its performance under the most rugged conditions. Its central aluminum pipe provides superb fiber protection making it ideal for everything from basic installations to those applications requiring high tensions or for extremely long spans.

Features

- Fiber counts up to 144
- Optical unit provides exceptional mechanical and thermal protection for fibers
- Thick-walled aluminum pipe provides excellent crush resistance and low resistivity
- Stranded wires selected to optimize mechanical and electrical properties
- Dielectric optical units are available with 6, 8, 12, 18 and 24 fibers
- Supplied with up to 6 optical units, depending on fiber count

Cable Components



Temperature Range

Operating -40°C to +85°C
 Storage -50°C to +85°C
 Installation -30°C to +85°C

Typical Designs

FIBERS (max)	OPGW SIZE	FAULT CURRENT (kA) ² sec	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		APPROXIMATE RBS		SAG10 CHART #	MAX SHIP LENGTH (per reel type)	
			in ²	mm ²	in	mm	lbs/ft	kg/m	lbs	kgf		Wood (m)	Steel (m)
24	AC-64/528	68	0.1510	97.43	0.528	13.4	0.359	0.535	18,000	8,100	1-1450	6,700	7,000
24	AC-29/34/528	81	0.1510	97.43	0.528	13.4	0.281	0.418	12,000	5,440	1-1439	7,000	7,000
24	AC-74/552	81	0.1666	107.51	0.552	14.0	0.405	0.602	20,500	9,300	1-1453	6,000	7,000
24	AC-37/37/552	98	0.1666	107.51	0.552	14.0	0.306	0.455	13,000	6,000	1-1438	7,000	7,000
36	AC-71/571	95	0.1758	113.39	0.571	14.5	0.411	0.611	20,000	9,050	1-1461	5,900	7,000
36	AC-33/38/571	110	0.1758	113.39	0.571	14.5	0.323	0.478	13,250	6,000	1-1438	7,000	7,000
36	AC-86/607	118	0.2002	129.14	0.607	15.4	0.481	0.713	24,250	11,000	1-1457	5,000	6,900
36	AC-40/47/607	141	0.2002	129.14	0.607	15.4	0.375	0.558	16,000	7,250	1-1439	6,500	7,000
48	AC-86/646	151	0.2208	142.43	0.646	16.4	0.509	0.757	24,500	11,100	1-1461	4,700	6,600
48	AC-34/52/646	172	0.2208	142.43	0.646	16.4	0.417	0.621	17,250	7,800	1-1439	5,800	7,000
48	AC-129/724	239	0.2876	185.57	0.724	18.4	0.703	1.046	34,250	15,500	1-1453	3,400	4,700
48	AC-65/65/724	292	0.2876	185.57	0.724	18.4	0.530	0.789	21,900	9,900	1-1438	4,500	5,500
72	AC-88/659	154	0.2232	143.98	0.659	16.7	0.516	0.768	25,000	11,250	1-1461	4,700	6,500
72	AC-38/49/659	177	0.2232	143.98	0.659	16.7	0.414	0.615	17,000	7,750	1-1438	5,800	6,800
72	AC-102/691	182	0.2460	158.96	0.691	17.5	0.582	0.866	28,750	13,000	1-1450	4,100	5,700
72	AC-44/58/691	212	0.2460	158.96	0.691	17.5	0.465	0.692	19,900	9,000	1-1439	5,200	6,800
144	AC-82/646	144	0.2147	138.52	0.646	16.4	0.498	0.741	23,250	10,500	1-1461	4,800	6,500
144	AC-39/43/646	166	0.2147	138.52	0.646	16.4	0.395	0.588	15,500	7,000	1-355	6,100	6,500
144	AC-125/726	230	0.2813	181.48	0.726	18.4	0.6919	1.030	34,250	15,000	1-1453	3,500	4,800
144	AC-58/67/726	277	0.2813	181.48	0.726	18.4	0.5378	0.800	22,500	10,250	1-1439	4,500	6,100

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these catalog designs can be found on PLS-CADD web page.

NOTES:

Data contained in the table are approximations. Please reference the exact cable data sheet for the most up-to-date information.

The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.



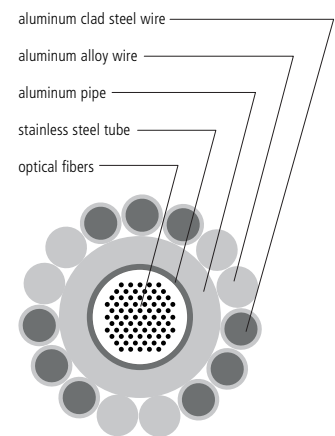
CentraCore OPGW

CentraCore Optical Ground Wire is available in fiber counts up to 96, and due to its small size, offers a unique solution to the diameter and weight concerns on many of today's overloaded towers. A central stainless steel tube houses the optical fibers. The stainless steel tube is then inserted into an aluminum pipe which provides added crush protection while increasing the conductivity. The fibers are protected from environmental conditions (lightning, short circuit, loading) to ensure reliability and longevity.

Features

- Fiber counts up to 96
- Very small diameter, low weight
- Laser-welded, hermetically sealed stainless steel tubes provide mechanical and thermal protection for optical fibers
- Central tube provides mechanical and thermal protection for optical fibers
- Excellent crush resistance and high fault current rating capability
- Unique designs have maximum allowable tension to control fiber strain
- Stranded wires selected to optimize mechanical and electrical properties of cable

Cable Components



Temperature Range

Operating - 40°C to + 85°C

Storage - 50°C to + 85°C

Installation - 30°C to + 85°C

Typical Designs

FIBERS (max)	OPGW SIZE	FAULT CURRENT (kA) ² sec	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		APPROXIMATE RBS		SAG10 CHART #	MAX SHIP LENGTH (per reel type)	
			in ²	mm ²	in	mm	lbs/ft	kg/m	lbs	kgf		Wood (m)	Steel (m)
48	CC-57/465	43	0.1248	80.52	0.465	11.80	0.314	0.467	16,250	7,400	1-1421	7000	7000
48	CC-29/29/465	54	0.1248	80.52	0.465	11.80	0.238	0.354	10,500	4,700	1-1455	7000	7000
48	CC-54/472	53	0.1334	86.09	0.472	12.00	0.316	0.470	15,750	7,100	1-1450	7000	7000
48	CC-27/27/472	63	0.1334	86.09	0.472	12.00	0.244	0.362	10,000	4,600	1-1438	7000	7000
48	CC-72/504	58	0.1482	95.64	0.504	12.80	0.382	0.568	20,500	9,300	1-1442	6350	7000
48	CC-32/40/504	73	0.1482	95.64	0.504	12.80	0.296	0.441	13,750	6,300	1-1440	7000	7000
48	CC-75/528	77	0.1663	107.28	0.528	13.40	0.411	0.612	21,500	9,700	1-1453	5950	7000
48	CC-38/38/528	96	0.1663	107.28	0.528	13.40	0.310	0.462	13,750	6,200	1-1439	7000	7000
72	CC-54/472	51	0.1318	85.01	0.472	12.00	0.316	0.470	15,750	7,100	1-1457	7000	7000
72	CC-27/27/472	61	0.1318	85.01	0.472	12.00	0.243	0.362	10,000	4,600	1-1438	7000	7000
72	CC-63/507	71	0.1547	99.80	0.507	12.90	0.367	0.546	18,250	8,300	1-1450	6650	7000
72	CC-32/32/507	85	0.1547	99.80	0.507	12.90	0.282	0.420	11,750	5,300	1-1438	7000	7000
72	CC-75/528	75	0.1646	106.20	0.528	13.40	0.410	0.611	21,500	9,700	1-1421	5950	7000
72	CC-38/38/528	94	0.1646	106.20	0.528	13.40	0.310	0.461	13,750	6,200	1-1455	7000	7000
96	CC-65/500	51	0.1393	89.86	0.500	12.70	0.385	0.573	18,900	8,600	1-1442	4800	4800
96	CC-30/36/500	64	0.1393	89.86	0.500	12.70	0.306	0.456	12,750	5,800	1-1440	4800	4800
96	CC-75/528	62	0.1550	100.00	0.528	13.40	0.431	0.641	21,500	9,800	1-1442	4800	4800
96	CC-38/38/528	81	0.1550	100.00	0.528	13.40	0.331	0.492	14,000	6,300	1-917	4800	4800
96	CC-86/563	86	0.1803	116.31	0.563	14.30	0.488	0.726	24,500	11,100	1-1425	4800	4800
96	CC-34/51/563	106	0.1803	116.31	0.563	14.30	0.340	0.591	17,400	7,900	1-1460	4800	4800

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these catalog designs can be found on PLS-CADD web page.

NOTES:

Data contained in the table are approximations. Please reference the exact cable data sheet for the most up-to-date information.

The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.



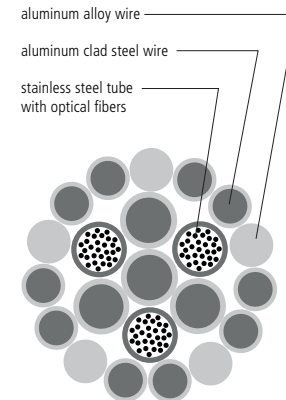
HexaCore OPGW

HexaCore Optical Ground Wire cable houses and protects the optical fibers within gel-filled stainless steel tubes. Aluminum clad steel and aluminum alloy wires are stranded with the tubes to create a dual-layer design suitable for a variety of applications.

Features

- Fiber counts up to 432 or higher for custom designs
- Laser-welded, hermetically sealed stainless steel tubes provide mechanical and thermal protection for optical fibers
- High load, long span capability
- Anti-rotational devices usually not required for installation
- Each stainless steel tube is uniquely identified for organization at splice locations
- Stranded wires selected to optimize mechanical and electrical properties of cable

Cable Components



Temperature Range

Operating - 40°C to + 85°C

Storage - 50°C to + 85°C

Installation - 30°C to + 85°C

Typical Designs

FIBERS (max)	OPGW SIZE	FAULT CURRENT (kA) ² sec	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		APPROXIMATE RBS		SAG10 CHART #	MAX SHIP LENGTH (per reel type)	
			in ²	mm ²	in	mm	lbs/ft	kg/m	lbs	kgf		Wood (m)	Steel (m)
24	SX-32/45/472	41	0.1235	79.67	0.472	12.0	0.281	0.418	14,750	6,700	1-1461	7000	7000
36	SX-41/32/472	41	0.1186	76.53	0.472	12.0	0.247	0.368	12,000	5,400	1-350	7000	7000
24	SX-75/37/555	96	0.1757	113.37	0.555	14.1	0.317	0.471	15,250	6,900	1-1438	7000	7000
24	SX-90/30/575	116	0.1889	121.86	0.575	14.6	0.313	0.466	14,250	6,400	1-430	7000	7000
96	S1-82/52/630	137	0.2131	137.45	0.630	16.0	0.417	0.621	20,000	9,000	1-1170	5800	7000
96	S1-83/59/647	152	0.2265	146.13	0.647	16.4	0.453	0.674	22,000	9,900	1-917	5300	7000
96	S1-91/61/668	177	0.2429	156.69	0.668	17.0	0.479	0.712	23,250	10,500	1-917	5100	6450
144	S1-71/52/630	118	0.2006	129.41	0.630	16.0	0.416	0.619	19,750	8,950	1-1440	5950	7000
144	S1-73/59/647	132	0.2140	138.09	0.647	16.4	0.452	0.673	21,750	9,800	1-350	5400	6850
144	S1-81/61/668	155	0.2304	148.65	0.668	17.0	0.472	0.702	23,000	10,400	1-1440	5150	6450
288	S1-41/52/630	68	0.1632	105.28	0.630	16.0	0.414	0.616	19,000	8,600	1-1461	5890	7000
288	S1-42/59/647	79	0.1766	113.96	0.647	16.4	0.450	0.670	21,000	9,500	1-1461	5400	6850
288	S1-50/61/668	97	0.1930	124.52	0.668	17.0	0.476	0.708	22,250	10,000	1-1461	5125	6450

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these catalog designs can be found on PLS-CADD web page.

NOTES:

Data contained in the table are approximations. Please reference the exact cable data sheet for the most up-to-date information.

The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications

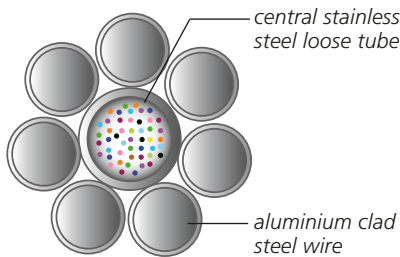


Metallic Aerial Self-Supporting Cable (MASS)

Metallic Aerial Self-Supporting (MASS) Cable is an alternative solution used for installing optical cable on medium and high voltage power lines. It is typically used when existing phase or ground wire replacement is not possible or economical. MASS cable is a compact, light-weight solution with no electrical function, designed to provide a telecommunications path without interfering with the existing power lines or infrastructure. Its small size helps minimize loading on towers and poles, yet it is completely self-supporting to meet sag and tension requirements. It is typically installed in "under build" applications beneath the live phases.

Features:

- Central Stainless Steel loose tube design
- Typical diameter between 9 – 12 mm (0.35" – 0.47")
- Fiber counts up to 72
- No voltage limit – suitable for medium & high voltage lines
- Suitable for use on lines without a ground wire
- Convenient means to add fiber where OPGW is already installed
- Deployed in regions with high lightning activity
- Can be installed without an outage
- Small cable size limits additional structural loading
- Wind loading properties similar to standard conductors
- Suitable for wooden poles with universal attachment
- Aluminum Clad, Aluminum Alloy or Galvanized Steel wire options available depending on mechanical properties required



Specifications:

FIBERS (max)	TYPICAL SIZE	OVERALL DIAMETER		WEIGHT		RBS		STAINLESS STEEL TUBE ID / OD		WIRE DIAMETER	
		in	mm	lbs/ft	kg/m	lbs	Kg	in	mm	in	mm
24	ACS 28	0.30	7.5	1.50	0.207	7,958	3,610	0.10 / 0.11	2.6 / 3.0	0.09	2.25
24	ACS 42	0.35	9.0	2.19	0.303	12,140	5,506	0.10 / 0.11	2.6 / 3.0	0.11	3.0
30	ACS 34	0.33	8.3	1.83	0.253	9,824	4,456	0.11 / 0.13	2.9 / 3.3	0.09	2.5
30	ACS 50	0.39	9.8	2.57	0.355	14,253	6,465	0.11 / 0.13	2.85 / 3.25	0.13	3.25
36	ACS 37	0.34	8.6	1.99	0.275	10,633	4,823	0.11 / 0.13	2.9 / 3.4	0.10	2.6
36	ACS 58	0.41	10.5	2.99	0.414	15,647	7,097	0.11 / 0.14	3.0 / 3.5	0.14	3.5
48	ACS 40	0.35	9.0	2.15	0.298	11,465	5,201	0.12 / 0.14	3.1 / 3.6	0.10	2.7
48	ACS 61	0.43	10.8	3.17	0.438	16,568	7,515	0.12 / 0.14	3.1 / 3.6	0.14	3.6
60	ACS 45	0.37	9.5	2.39	0.331	12,769	5,792	0.13 / 0.15	3.3 / 3.8	0.11	2.85
60	ACS 66	0.44	11.3	3.43	0.475	17,692	8,025	0.13 / 0.15	3.3 / 3.8	0.14	3.75
72	ACS 49	0.39	10.0	2.67	0.369	14,163	6,424	0.13 / 0.15	3.4 / 4.0	0.11	3.0
72	ACS 75	0.47	12.0	3.92	0.542	19,491	8,841	0.13 / 0.15	3.4 / 4.0	0.16	4.0

ACS - Aluminum Clad Steel wire.

Wire is available in ACS and Aluminum Alloy. Both are available in a variety of grades, please ask for details.

MASS cables are designed to customer specification.

NOTE: The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.



Optical Phase Conductor

Optical Phase Conductor (OPPC) is used as an alternative telecommunications solution when there is no existing ground wire, meaning Optical Ground Wire (OPGW) is not a viable option. The basic construction is similar to conventional OPGW, only it is designed to simulate the mechanical and electrical characteristics of the phase wire it replaces. Unlike OPGW, where the cable is not carrying continuous current, OPPC is energized along high voltage power lines. Therefore it requires specially adapted splice boxes and insulators to accommodate the live line conditions.

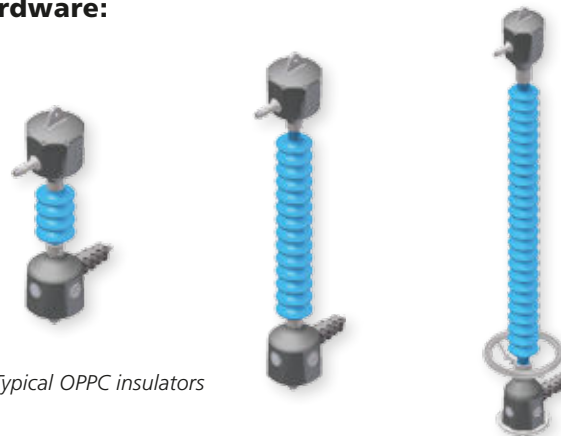
AFL can design a cable to accommodate your precise application. To do so, we need the properties of the phase conductor you are seeking to replace. With that, we can do the rest.

Features:

- Engineered to match existing conductors
- Available in fiber counts up to 144
- Distribution or Transmission – from 36 to 245 kV
- Suitable for any type of optical fiber, single-mode or multimode
- Designed to match electrical properties of conductor it replaces
- Uses standard fiber optic deadends and suspension grips
- Full range of hardware options available



OPPC Hardware:



Typical OPPC insulators



OPPC joint box - Cast Aluminium



OPPC joint box - Self Supporting



26 kV Isolator Kit for OPGW

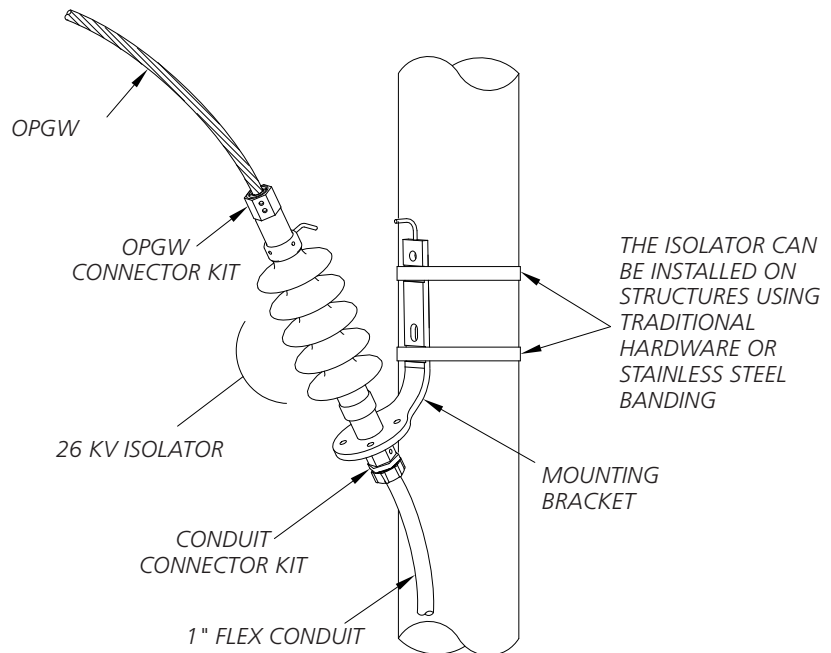
The 26 kV Isolator Kit is designed for aerial optical cable system applications in which complete electrical discontinuity is required. The isolator kit provides reliable interruption of electrical current, at voltages up to 26 kV and is a critical component of optical conductor and neutral systems, as well as optical ground-wire systems in which sectionalization of transient currents is required. The isolator can be installed on structures using traditional hardware or stainless steel banding.

Kit Includes

- OPGW Connector Kit
- 26 kV Isolator
- Conduit Connector Kit
- Mounting Bracket
- For use on AFL AlumaCore cables only

Specifications

PARAMETER	VALUE
Max. Voltage	26 kV
Weight	5 lbs. (approx.)



Ordering Information

ISOL	P	XX/YY	ZZZ
Isolator	Blank = Standard Bracket (as shown) P = 90° Bracket for Routing Cable Parallel to Pole	Cross Sectional Area Aluminum Strands / AW Strands (mm ²)	Cable OD (Decimal Inches)

Ordering Example: ISOL47/53/680

NEW

Renewables Optimized OPGW



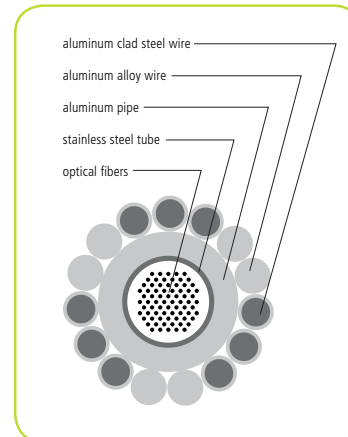
Renewable energy initiatives such as wind and solar farms have become a routine part of the new global energy business. Like most traditional transmission line projects, Optical Ground Wire is a key component in the planned power grid. Typical renewable applications require smaller, lighter-weight cables that can be delivered with minimal delay. In response to the needs of this market, AFL has optimized a select group of its Optical Ground Wire family specifically for these renewable applications. These designs take advantage of CentraCore's compact and robust design features—48 single-mode fibers are protected by a gel-filled, laser-welded stainless steel tube, central Aluminum pipe and stranded outer wires. Refer to all of the features of [CentraCore OPGW cable](#).

Ordering Information

Below is only a partial list of designs. Any of AFL's catalog or custom OPGW designs are available for renewable applications.

DESIGN NUMBER	FIBERS	OPGW SIZE	FAULT CURRENT	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		RBS		SAG10 CHART NO.	MAX SHIP LENGTH (PER REEL TYPE)	
			(KA) ² SEC	IN ²	MM ²	IN	MM	LBS/FT	KG/M	LBS	KGf		WOOD (M)	STEEL (M)
DNO-10126	48	CC-52/461	47	0.1265	81.62	0.461	11.70	0.302	0.450	15,403	6,987	1-1457	6,400	6,400
DNO-10155	48	CC-26/26/461	56	0.1265	81.62	0.461	11.70	0.233	0.346	10,066	4,566	1-1438	6,400	6,400
DNO-10156	48	CC-54/465	49	0.1300	83.86	0.465	11.80	0.312	0.464	16,012	7,263	1-1457	6,400	6,400
DNO-10157	48	CC-27/27/465	59	0.1300	83.86	0.465	11.80	0.240	0.357	10,446	4,738	1-1438	6,400	6,400
DNO-10167	48	CC-61/484	56	0.1399	90.25	0.484	12.30	0.341	0.508	17,748	8,051	1-1453	6,400	6,400
DNO-10168	48	CC-28/33/484	67	0.1399	90.25	0.484	12.30	0.268	0.398	12,093	5,485	1-1455	6,400	6,400
DNO-10159	48	CC-70/512	67	0.1554	100.26	0.512	13.00	0.385	0.573	20,473	9,286	1-1421	6,400	6,400
DNO-10160	48	CC-35/35/512	84	0.1554	100.26	0.512	13.00	0.291	0.433	13,225	5,999	1-1455	6,400	6,400
DNO-10161	48	CC-87/551	88	0.1801	116.17	0.551	14.00	0.457	0.680	24,195	10,975	1-1425	5,300	6,400
DNO-10162	48	CC-38/48/551	109	0.1801	116.17	0.551	14.00	0.355	0.528	16,464	7,468	1-917	5,300	6,400
DNO-10163	48	CC-89/555	91	0.1839	118.66	0.555	14.10	0.468	0.696	24,856	11,275	1-1425	5,200	6,400
DNO-10164	48	CC-40/49/555	114	0.1839	118.66	0.555	14.10	0.363	0.539	16,902	7,667	1-917	5,200	6,400

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these are available through your AFL representative.





Aerial Drop Cable

Aerial Drop Cable is specifically designed for Fiber-to-the-Subscriber applications. It is a round, all dielectric cable ideally suited for self-supporting drop-type installations as well as in lashed or conduit builds.

6-Fiber Design

Typical Spans with 2.0% Installation Sag:

- NES-C Heavy 100 ft (30 meters)
- NES-C Medium 185 ft (56 meters)
- NES-C Light 370 ft (113 meters)

Temperature Range

Operating: -40°C to +70°C

Storage: -50°C to +70°C

Installation: -30°C to +70°C

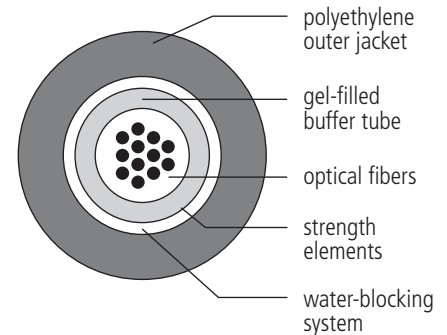
12-Fiber Design

Typical Spans with 2.0% Installation Sag:

- NES-C Heavy 75 ft (23 meters)
- NES-C Medium 140 ft (43 meters)
- NES-C Light 260 ft (75 meters)

Note: Typical installations should not be more than 4-6 spans. Point-to-point distance should not exceed 400 ft.

Cable Components



Features

- Designed for use with inexpensive attachment hardware
- Compatible with standard splice closures
- Self-supporting - no messenger needed
- Small cross section for maximum density in closures and conduit

Mechanical Data

FIBER COUNT	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM LENGTHS*			
	INCHES	MM	LBS/1000 FT	KG/KM	SINGLE-MODE		MULTIMODE	
					FEET	METERS	FEET	METERS
1 - 6	.256	6.5	23	34	32,800	10,000	26,250	8,000
7 - 12	.307	7.8	34	50	27,500	8,400	26,250	8,000

* Longer lengths may be available upon request.

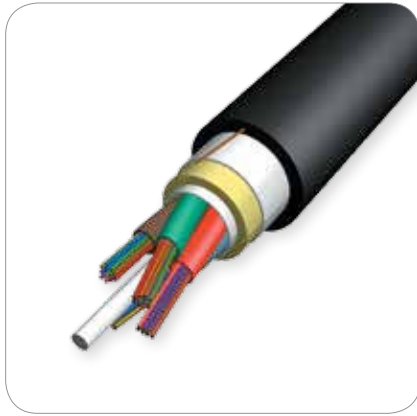
Installation Information

FIBER COUNT	MAXIMUM LOADING OPERATING TENSION		MINIMUM BENDING RADIUS (DYNAMIC)		MINIMUM BENDING RADIUS (STATIC)	
	LBS	N	INCHES	CM	INCHES	CM
1 - 6	270	1113	5	13	2.5	6.5
7 - 12	270	1113	6	16	3	8

NOTE: AFL recommends coiling a minimum of 12 feet (3.6 meters) into 6 inch (0.15 meters) loops at the entrance to all splice closures.

Ordering Information

FIBER COUNT	FIBER TYPE	AFL NO.	MAXIMUM ATTENUATION (DB/KM)			BANDWIDTH (MHZ•KM)	
			850 NM	1300 NM	1550 NM	850 NM	1300 NM
1 - 6	62.5/125 Giga-Link™ 300	AE00666110AA9	3.5	1.2	N/A	200	600
7 - 12		AE0126C110AC1					
1 - 6	50/125 Giga-Link™ 600	AE00656110AA9	2.9	0.9	N/A	500	500
7 - 12		AE0125C110AC1					
1 - 6	Single-mode	AE00696110AA9	N/A	0.35	0.25	N/A	N/A
7 - 12		AE0129C110AC1					



Mini-Span® ADSS Cable

AFL Mini-Span All-Dielectric Self-Supporting (ADSS) cable is designed for outside plant aerial and duct applications in local and campus network loop architectures. From pole-to-build to town-town installations, the Mini-Span cabling system, which includes cables, suspension, dead end and termination enclosures, offers a comprehensive transmission circuit infrastructure with proven, high-reliability performance. See AFL's Fiber Optic Cable Hardware catalog for more information. As the ADSS cabling concept implies, a separate messenger support wire hanging system is not required, greatly reducing installation time and improving upfront and maintenance labor costs.

Mini-Span includes fiber counts up to 96 optical fibers and any type or combination of single-mode and laser-optimized multimode fibers with the cable. Pole-to-Pole span lengths range from 50 feet to over 1000 feet.

Temperature Range

Operating: -40°C to +70°C

Storage: -50°C to +70°C

Installation: -30°C to +70°C

Installation Information

CABLE	NESC SPANS (@ 1.5% INITIAL SAG) FEET (METERS)			MAX. SAGGING TENSION		MAX. LOADING OPERATING TENSION		MIN. BENDING RADIUS (DYNAMIC)		MIN. BENDING RADIUS (STATIC)	
	LIGHT	MEDIUM	HEAVY	LBS	N	LBS	N	INCHES	CM	INCHES	CM
Mini-Span 323	500 (152)	300 (91)	175 (53)	147	654	374	1668	7	17	3.5	8.5
Mini-Span 383	450 (137)	300 (91)	180 (55)	183	814	402	1,785	8	20	4	10

CABLE	NESC SPANS (@ 1% INITIAL SAG) FEET (METERS)			MAX. SAGGING TENSION		MAX. LOADING OPERATING TENSION		MIN. BENDING RADIUS (DYNAMIC)		MIN. BENDING RADIUS (STATIC)	
	LIGHT	MEDIUM	HEAVY	LBS	N	LBS	N	INCHES	CM	INCHES	CM
Mini-Span 424	600 (183)	440 (134)	275 (84)	424	1886	707	3145	9	22	4	11
Mini-Span 535	1050 (320)	850 (259)	575 (175)	1,306	5,809	1,783	7,936	13	27	5	14

Optical Information

CABLE	MAXIMUM ATTENUATION (db/km)			BANDWIDTH (MHz•km)		
	SINGLE-MODE (1310 nm/1550 nm)	MULTIMODE *62.5/125 µm (850 nm/1300 nm)	MULTIMODE 50/125 µm (850 nm/1300 nm)	SINGLE-MODE (1310 nm/1550 nm)	MULTIMODE *62.5/125 µm (850 nm/1300 nm)	MULTIMODE 50/125 µm (850 nm/1300 nm)
Mini-Span 323	0.40/0.30	3.5/1.2	3.5/1.2	n/a	200/600	500/500
Mini-Span 383	0.35/0.25	3.5/1.2	2.9/0.9			
Mini-Span 424						
Mini-Span 535						

* All 62.5/125 µm multimode ADSS cable transmission performances meet or exceed FDDI requirements. Premium transmission performance fibers available on request.

Mini-Span® ADSS Cable

Mechanical Data

CABLE	FIBER COUNT	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM LENGTHS*			
		INCHES	MM	LBS/1000'	KG/KM	SINGLE-MODE		MULTIMODE	
						FEET	METERS	FEET	METERS
Mini-Span 323	2-24	0.323	8.2	35	53	32,800	10,000	26,250	8,000
Mini-Span 383	2-48	0.383	9.7	49	72	32,800	10,000	26,250	8,000
Mini-Span 424	2-60	0.424	10.8	57	84	32,800	10,000	26,250	8,000
Mini-Span 535	2-96	0.535	13.6	100	148	32,800	10,000	26,250	8,000

* Longer lengths may be available upon request.

Ordering Information

CABLE	FIBER COUNT	FIBERS PER TUBE	NUMBER OF TUBES / FIBERS	AFL NO.		
				SINGLE-MODE	MULTIMODE 62.5/125	MULTIMODE 50/125
Mini-Span 323	6	6	1 w/6	AE00696420AA1	AE00666420AA1	AE00656420AA1
	12	6	2 w/6	AE01296420AA1	AE01266420AA1	AE01256420AA1
	18	6	3 w/6	AE01896420AA1	AE01866420AA1	AE01856420AA1
	24	6	4 w/6	AE02496420AA1	AE02466420AA1	AE02456420AA1
Mini-Span 383	6	6	1 w/6 (3 fillers)	AE0069C420AA0	AE0066C420AA0	AE0065C420AA0
	12	12	1 w/12 (3 fillers)	AE0129C420AA0	AE0126C420AA0	AE0125C420AA0
	18	12	1 w/12, 1 w/6 (2 fillers)	AE0189C420AA0	AE0186C420AA0	AE0185C420AA0
	24	12	2 w/12 (2 fillers)	AE0249C420AA0	AE0246C420AA0	AE0245C420AA0
	30	12	2 w/12, 1 w/6 (1 filler)	AE0309C420AA0	AE0306C420AA0	AE0305C420AA0
	36	12	3 w/12 (1 filler)	AE0369C420AA0	AE0366C420AA0	AE0365C420AA0
Mini-Span 424	48	12	4 w/12	AE0489C420AA0	AE0486C420AA0	AE0485C420AA0
	6	6	1 w/6 (4 fillers)	AE0069C520AA4	AE0066C520AA4	AE0065C520AA4
	12	12	1 w/12 (4 fillers)	AE0129C520AA4	AE0126C520AA4	AE0125C520AA4
	18	12	1 w/12, 1 w/6 (3 fillers)	AE0189C520AA4	AE0186C520AA4	AE0185C520AA4
	24	12	2 w/12 (3 fillers)	AE0249C520AA4	AE0246C520AA4	AE0245C520AA4
	30	12	2 w/12, 1 w/6 (2 fillers)	AE0309C520AA4	AE0306C520AA4	AE0305C520AA4
	36	12	3 w/12 (2 fillers)	AE0369C520AA4	AE0366C520AA4	AE0365C520AA4
	48	12	4 w/12 (1 filler)	AE0489C520AA4	AE0486C520AA4	AE0485C520AA4
Mini-Span 535	60	12	5 w/12 (no fillers)	AE0609C520AA4	AE0606C520AA4	AE0605C520AA4
	6	6	1 w/6 (7 fillers)	AE0069C820EA7	AE0066C820EA7	AE0065C820EA7
	12	12	1 w/12 (7 fillers)	AE0129C820EA7	AE0126C820EA7	AE0125C820EA7
	18	12	1 w/12, 1 w/6 (6 fillers)	AE0189C820EA7	AE0186C820EA7	AE0185C820EA7
	24	12	2 w/12 (6 fillers)	AE0249C820EA7	AE0246C820EA7	AE0245C820EA7
	30	12	2 w/12, 1 w/6 (5 fillers)	AE0309C820EA7	AE0306C820EA7	AE0305C820EA7
	36	12	3 w/12 (5 fillers)	AE0369C820EA7	AE0366C820EA7	AE0365C820EA7
	48	12	4 w/12 (4 fillers)	AE0489C820EA7	AE0486C820EA7	AE0485C820EA7
	60	12	5 w/12 (3 fillers)	AE0609C820EA7	AE0606C820EA7	AE0605C820EA7
	72	12	6 w/12 (2 fillers)	AE0729C820EA7	AE0726C820EA7	AE0725C820EA7
	84	12	7 w/12 (1 filler)	AE0849C820EA7	AE0846C820EA7	AE0845C820EA7
	96	12	8 w/12 (no fillers)	AE0969C820EA7	AE0966C820EA7	AE0965C820EA7

Contact customer service for price and availability. Non-zero dispersion-shifted fibers are also available.

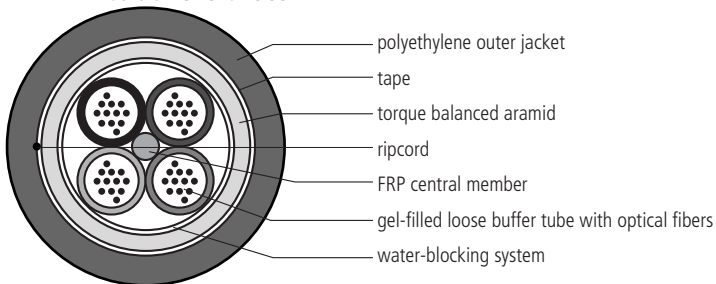
Mini-Span® ADSS Cable

Sag and Tension Information

CABLE	SPAN		INITIAL SAG	INITIAL TENSION		NESC LIGHT LOADING			NESC MEDIUM LOADING			NESC HEAVY LOADING		
	FEET	METERS		%	LBS	N	SAG	TENSION		SAG	TENSION		SAG	TENSION
			%				LBS	N	%	LBS	N	%	LBS	N
MINI-SPAN 323	50	15	1.5	15	67	0.4	66	294	2.1	101	449	3.2	152	677
	75	23	1.5	22	98	0.5	90	339	2.3	135	602	3.6	202	901
	100	30	1.5	30	133	0.5	111	494	2.5	166	741	3.9	248	1,102
	125	38	1.5	37	165	0.5	131	583	2.7	195	867	4.2	289	1,288
	150	46	1.5	44	196	0.5	150	667	2.8	222	989	4.5	329	1,463
	175	53	1.5	52	232	0.6	168	748	3.0	248	1,104	4.7	366	1,629
	200	61	1.5	59	262	0.6	185	825	3.1	273	1,214	—	—	—
	225	69	1.5	66	294	0.6	202	900	3.2	297	1,321	—	—	—
	250	76	1.5	74	329	0.6	219	973	3.3	320	1,424	—	—	—
	275	84	1.5	81	360	0.6	235	1,044	3.4	342	1,524	—	—	—
	300	91	1.5	88	392	0.6	250	1,113	3.5	364	1,621	—	—	—
	325	99	1.5	96	427	0.7	265	1,181	—	—	—	—	—	—
	350	107	1.5	103	458	0.7	280	1,247	—	—	—	—	—	—
	375	114	1.5	111	494	0.7	295	1,312	—	—	—	—	—	—
	400	122	1.5	118	525	0.7	309	1,376	—	—	—	—	—	—
	425	130	1.5	125	556	0.7	324	1,440	—	—	—	—	—	—
	450	137	1.5	133	592	0.7	338	1,502	—	—	—	—	—	—
475	145	1.5	140	623	0.7	351	1,563	—	—	—	—	—	—	
500	152	1.5	147	654	0.7	365	1,624	—	—	—	—	—	—	
MINI-SPAN 383	50	15	1.5	20	89	0.5	76	337	2.2	108	482	3.2	161	717
	75	23	1.5	30	133	0.5	103	457	2.4	146	648	3.6	215	956
	100	30	1.5	41	182	0.6	128	568	2.6	179	798	4.0	263	1,171
	125	38	1.5	51	227	0.6	151	671	2.8	211	938	4.2	308	1,370
	150	46	1.5	61	271	0.6	173	768	2.9	240	1,070	4.5	350	1,558
	175	53	1.5	71	316	0.6	194	862	3.0	269	1,196	4.7	390	1,736
	200	61	1.5	81	360	0.7	214	952	3.2	296	1,317	—	—	—
	225	69	1.5	91	405	0.7	234	1,040	3.3	322	1,434	—	—	—
	250	76	1.5	101	449	0.7	253	1,125	3.4	348	1,547	—	—	—
	275	84	1.5	112	498	0.7	272	1,209	3.5	372	1,657	—	—	—
	300	91	1.5	122	543	0.7	290	1,290	3.5	397	1,765	—	—	—
	325	99	1.5	132	587	0.8	308	1,370	—	—	—	—	—	—
	350	107	1.5	142	632	0.8	325	1,448	—	—	—	—	—	—
	375	114	1.5	152	676	0.8	343	1,525	—	—	—	—	—	—
	400	122	1.5	162	721	0.8	360	1,601	—	—	—	—	—	—
	425	130	1.5	172	765	0.8	377	1,676	—	—	—	—	—	—
	450	137	1.5	183	814	0.8	393	1,750	—	—	—	—	—	—

Typical Cable Components

4 Position 323 or 383



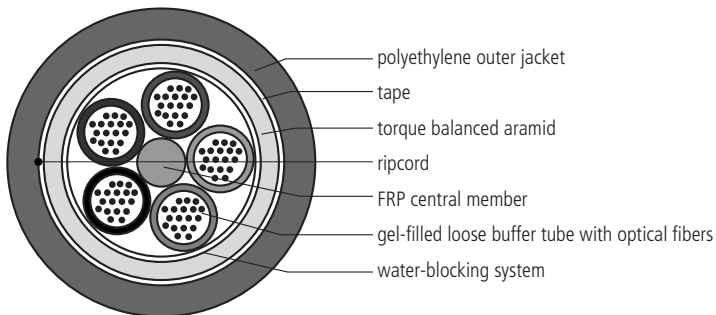
Mini-Span® ADSS Cable

Sag and Tension Information

CABLE	SPAN		INITIAL SAG	INITIAL TENSION		NESC LIGHT LOADING			NESC MEDIUM LOADING			NESC HEAVY LOADING		
	FEET	METERS		%	LBS	N	SAG	TENSION		SAG	TENSION		SAG	TENSION
			%				LBS	N	%	LBS	N	%	LBS	N
MINI-SPAN 424	50	15	1.0	35	156	0.4	104	463	1.7	142	632	2.6	207	921
	75	23	1.0	53	236	0.4	142	632	1.9	191	850	3.0	275	1,223
	100	30	1.0	71	316	0.5	176	783	2.1	235	1,095	3.2	337	1,499
	125	38	1.0	88	391	0.5	208	925	2.2	276	1,228	3.4	395	1,757
	150	46	1.0	106	472	0.5	238	1,059	2.4	315	1,401	3.6	449	1,997
	175	53	1.0	124	552	0.5	268	1,192	2.5	353	1,570	3.8	501	2,229
	200	61	1.0	141	627	0.6	296	1,317	2.6	389	1,730	4.0	50	2,447
	225	69	1.0	159	707	0.6	324	1,441	2.7	424	1,886	4.1	598	2,660
	250	76	1.0	177	787	0.6	351	1,561	2.7	458	2,037	4.2	645	2,869
	275	84	1.0	194	863	0.6	378	1,681	2.8	491	2,184	4.3	690	3,069
	300	91	1.0	212	943	0.6	404	1,737	2.8	524	2,331	—	—	—
	325	99	1.0	230	1,023	0.6	429	1,908	2.9	556	2,473	—	—	—
	350	107	1.0	247	1,099	0.6	455	2,024	3.0	587	2,611	—	—	—
	375	114	1.0	265	1,179	0.6	479	2,131	3.0	618	2,749	—	—	—
	400	122	1.0	283	1,259	0.6	504	2,242	3.1	648	2,882	—	—	—
	425	130	1.0	300	1,334	0.7	528	2,349	3.1	678	3,016	—	—	—
	450	137	1.0	318	1,415	0.7	552	2,455	3.2	703	3,145	—	—	—
	475	145	1.0	336	1,495	0.7	576	2,562	—	—	—	—	—	—
	500	152	1.0	353	1,570	0.7	600	2,669	—	—	—	—	—	—
	525	160	1.0	371	1,650	0.7	623	2,771	—	—	—	—	—	—
550	168	1.0	389	1,730	0.7	646	2,874	—	—	—	—	—	—	
575	175	1.0	406	1,806	0.7	669	2,976	—	—	—	—	—	—	
600	183	1.0	424	1,886	0.7	692	3,078	—	—	—	—	—	—	

Typical Cable Components

5 Position 424

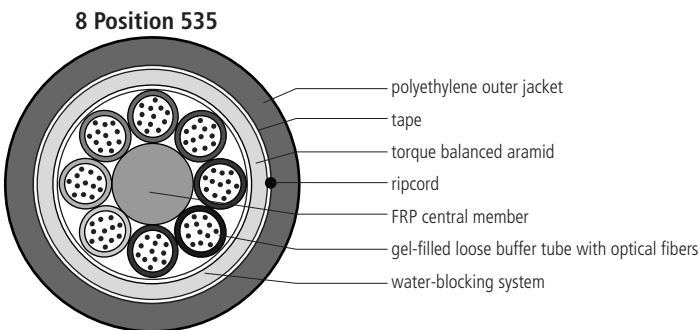


Mini-Span® ADSS Cable

Sag and Tension Information

CABLE	SPAN		INITIAL SAG	INITIAL TENSION		NESC LIGHT LOADING			NESC MEDIUM LOADING			NESC HEAVY LOADING		
	FEET	METERS		%	LBS	N	SAG	TENSION		SAG	TENSION		SAG	TENSION
			%				LBS	N	%	LBS	N	%	LBS	N
MINI-SPAN 535	50	15	1	62	276	0.4	160	713	1.5	206	918	2.1	297	1,319
	100	30	1	124	552	0.5	274	1,220	1.7	347	1,542	2.5	489	2,176
	150	46	1	187	832	0.6	375	1,670	1.9	469	2,087	2.8	655	2,915
	200	61	1	249	1,108	0.6	469	2,088	2.1	582	2,590	3.1	807	3,588
	250	76	1	311	1,383	0.6	559	2,486	2.2	689	3,063	3.3	948	4,217
	300	91	1	373	1,659	0.6	645	2,868	2.3	790	3,515	3.4	1,082	4,813
	350	107	1	435	1,935	0.7	728	3,239	2.4	888	3,951	3.6	1,210	5,384
	400	122	1	497	2,211	0.7	810	3,601	2.5	983	4,374	3.7	1,334	5,935
	450	137	1	560	2,491	0.7	889	3,956	2.5	1,076	4,785	3.8	1,454	6,469
	500	152	1	622	2,767	0.7	968	4,304	2.6	1,166	5,188	3.9	1,571	6,988
	550	168	1	684	3,043	0.7	1,045	4,647	2.7	1,255	5,583	4.0	1,685	7,495
	575	175	1	715	3,180	0.7	1,083	4,817	2.7	1,299	5,778	4.1	1,741	7,745
	600	183	1	746	3,318	0.7	1,121	4,985	2.7	1,342	5,971	—	—	—
	650	198	1	808	3,594	0.8	1,196	5,320	2.8	1,428	6,353	—	—	—
	700	213	1	870	3,870	0.8	1,270	5,650	2.8	1,513	6,730	—	—	—
	750	229	1	933	4,150	0.8	1,344	5,978	2.8	1,597	7,102	—	—	—
	800	244	1	995	4,426	0.8	1,417	6,303	2.9	1,679	7,469	—	—	—
	850	259	1	1,057	4,702	0.8	1,489	6,625	2.9	1,761	7,833	—	—	—
	900	274	1	1,119	4,978	0.8	1,561	6,945	—	—	—	—	—	—
950	290	1	1,181	5,253	0.8	1,633	7,263	—	—	—	—	—	—	
1,000	305	1	1,243	5,529	0.8	1,704	7,579	—	—	—	—	—	—	
1,050	320	1	1,306	5,809	0.8	1,775	7,894	—	—	—	—	—	—	

Typical Cable Components

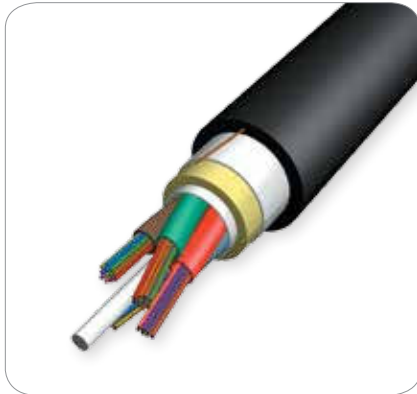


Mini-Span® ADSS Cable

Reel Information

REEL SPECS	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	182.8	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	320 kg	950 lbs	431 kg
MAXIMUM CABLE LENGTH (feet/meters)										
Mini-Span 323	15,256 ft	4,650 m	32,800 ft	10,000 m	—	—	—	—	—	—
Mini-Span 383	10,827 ft	3,300 m	25,202 ft	7,700 m	32,800 ft	10,000 m	—	—	—	—
Mini-Span 424	8,850 ft	2,700 m	20,250 ft	6,200 m	26,250 ft	8,000 m	32,800 ft	10,000 m	—	—
Mini-Span 484	6,500 ft	2,000 m	15,750 ft	4,800 m	21,000 ft	6,450 m	32,800 ft	10,000 m	—	—
Mini-Span 535	5,500 ft	1,675 m	12,800 ft	3,900 m	17,225 ft	5,250 m	26,000 ft	6,920 m	32,800 ft	10,000 m

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



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

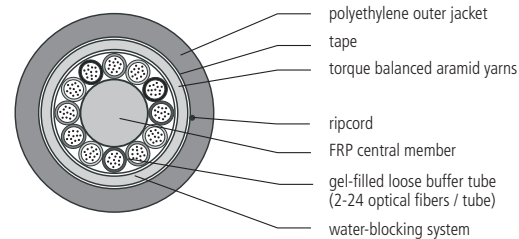
Installation: -30°C to +70°C

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.

Flex-Span® ADSS Fiber Optic Cable

NESCLIGHT @ 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

M E D I U M														
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	

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

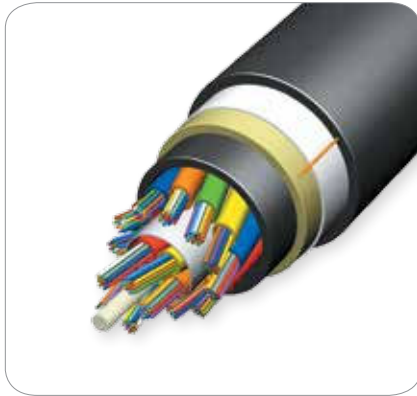
NESG HEAVY @ 1.5% INSTALLATION SAG														
SPAN		AFL NO.	WEIGHT		DIAMETER		MRCL		INITIAL TENSION ¹					
			LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED			
FEET	METERS									LBS	N	SAG %	LBS	N
12 FIBERS														
200	61	AE012★C520A08	0.057	84	0.425	10.8	539	2398	95	423	4.5	485	2158	
250	76	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	

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



All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

AFL-ADSS® (All-Dielectric Self-Supporting) cable is ideal for installation in distribution as well as transmission environments, even when live-line installations are required. As its name indicates, there is no support or messenger wire required, so installation is achieved in a single pass, making ADSS an economical and simple means of achieving a fiber optic network. AFL manufactures its own line of attachment hardware as well as supplies formed wire fittings when preferred.

Features

- Suitable for use on distribution and high voltage transmission lines
- Track-resistant outer jacket available for installations on high voltage lines where space potentials reach up to 25 kV
- 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 1500 ft (457 m) and fiber counts up to 432
- Custom designs available for larger span lengths or other fiber counts

Temperature Range

Operating: -40°C to +70°C

Storage: -50°C to +70°C

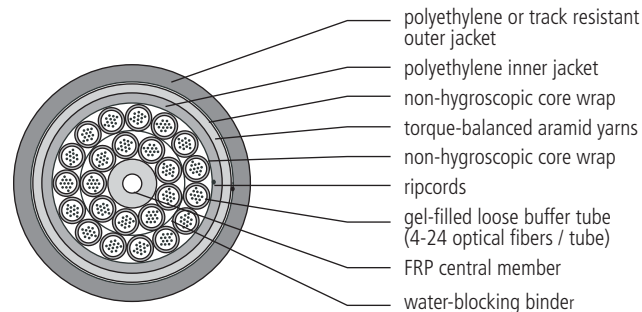
Installation: -30°C to +70°C

Typical Maximum Lengths

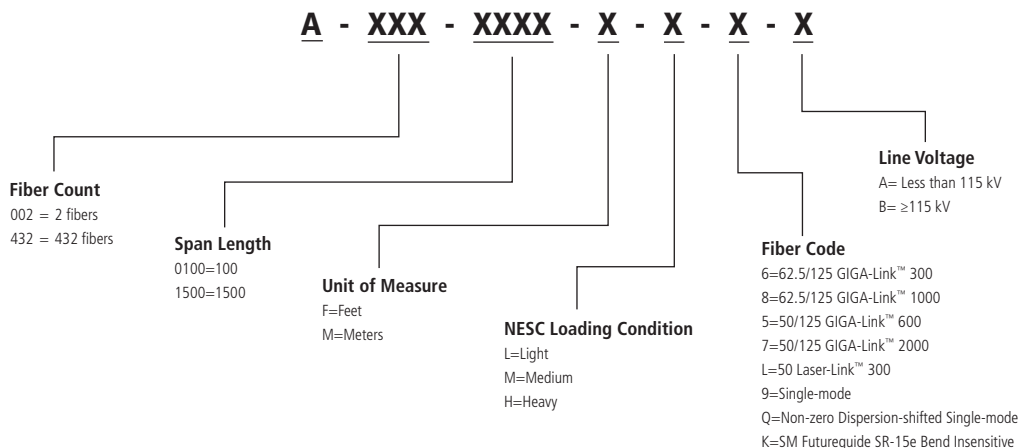
CABLE DIAMETER	REEL CAPACITY	
	FEET	METERS
≤ 0.85" (21.6 mm)	23,000	7,000
> 0.85" (21.6 mm)	10,000	3,000

NOTE: Longer lengths may be available upon request. Lengths shown may require non-standard reel sizes/types.

Cable Components



Quote Request Information



NOTE: The designs listed are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

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	3.5	1.2	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.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC LIGHT LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
12 FIBERS												
100	30	0.080	119	0.500	12.7	539	2398	100	446	0.6	194	862
200	61	0.080	119	0.500	12.7	539	2398	201	892	0.7	333	1479
300	91	0.080	119	0.500	12.7	539	2398	301	1338	0.7	459	2043
400	122	0.080	119	0.500	12.7	628	2793	401	1785	0.8	597	2654
500	152	0.080	119	0.500	12.7	746	3320	502	2232	0.8	739	3286
600	183	0.080	119	0.500	12.7	936	4162	602	2679	0.8	894	3976
700	213	0.084	125	0.512	13.0	1126	5008	737	3280	0.8	1079	4800
800	244	0.084	125	0.512	13.0	1253	5572	843	3750	0.8	1227	5459
900	274	0.084	126	0.512	13.0	1569	6981	949	4221	0.8	1409	6269
1000	305	0.084	126	0.512	13.0	1569	6981	1054	4690	0.8	1535	6829
1100	335	0.085	126	0.512	13.0	1823	8108	1162	5171	0.8	1708	7595
1200	366	0.090	134	0.528	13.4	1950	8672	1350	6005	0.8	1926	8569
1300	396	0.090	134	0.528	13.4	2203	9799	1463	6508	0.8	2103	9356
1400	427	0.090	134	0.528	13.4	2330	10363	1576	7010	0.8	2258	10044
1500	457	0.090	134	0.528	13.4	2456	10927	1689	7512	0.8	2412	10731
24 FIBERS												
100	30	0.081	121	0.500	12.7	539	2398	102	452	0.6	194	865
200	61	0.081	121	0.500	12.7	539	2398	203	904	0.7	334	1486
300	91	0.081	121	0.500	12.7	539	2398	305	1356	0.7	462	2053
400	122	0.081	121	0.500	12.7	628	2793	407	1808	0.8	600	2668
500	152	0.081	121	0.500	12.7	746	3320	508	2261	0.8	743	3304
600	183	0.081	121	0.500	12.7	936	4162	610	2714	0.8	899	3998
700	213	0.085	127	0.512	13.0	1126	5008	747	3322	0.8	1085	4826
800	244	0.085	127	0.512	13.0	1253	5572	854	3797	0.8	1234	5489
900	274	0.085	127	0.512	13.0	1569	6981	961	4274	0.8	1416	6301
1000	305	0.085	127	0.512	13.0	1696	7545	1068	4750	0.8	1566	6965
1100	335	0.086	127	0.512	13.0	1823	8108	1177	5236	0.8	1717	7635
1200	366	0.091	135	0.528	13.4	1950	8672	1366	6075	0.8	1937	8614
1300	396	0.091	136	0.528	13.4	2203	9799	1480	6584	0.8	2114	9405
1400	427	0.091	136	0.528	13.4	2456	10927	1595	7094	0.8	2292	10194
1500	457	0.091	136	0.528	13.4	2583	11490	1709	7602	0.8	2447	10886
36 FIBERS												
100	30	0.082	123	0.500	12.7	539	2398	103	458	0.6	195	867
200	61	0.082	123	0.500	12.7	598	2661	206	916	0.7	343	1526
300	91	0.082	123	0.500	12.7	598	2661	309	1375	0.8	464	2064
400	122	0.082	123	0.500	12.7	598	2661	412	1833	0.8	598	2660
500	152	0.082	123	0.500	12.7	776	3452	515	2291	0.8	752	3345
600	183	0.082	123	0.500	12.7	999	4444	618	2749	0.8	915	4070
700	213	0.086	129	0.512	13.0	1189	5290	756	3363	0.8	1102	4902
800	244	0.086	129	0.512	13.0	1253	5572	864	3843	0.8	1241	5520
900	274	0.086	129	0.512	13.0	1569	6981	973	4328	0.8	1424	6334
1000	305	0.086	129	0.512	13.0	1569	6981	1081	4809	0.8	1552	6904
1100	335	0.087	129	0.512	13.0	1823	8108	1192	5302	0.8	1726	7678
1200	366	0.092	137	0.528	13.4	2076	9236	1382	6147	0.8	1969	8759
1300	396	0.092	137	0.528	13.4	2203	9799	1497	6659	0.8	2125	9452
1400	427	0.092	137	0.528	13.4	2330	10363	1613	7175	0.8	2281	10146
1500	457	0.092	137	0.528	13.4	2456	10927	1728	7687	0.8	2438	10845

L I G H T

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC LIGHT LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
48 FIBERS												
100	30	0.083	124	0.500	12.7	539	2398	104	463	0.6	196	872
200	61	0.083	124	0.500	12.7	598	2661	209	930	0.7	344	1530
300	91	0.083	124	0.500	12.7	598	2661	313	1392	0.7	476	2117
400	122	0.083	124	0.500	12.7	628	2793	417	1855	0.8	606	2696
500	152	0.083	124	0.500	12.7	776	3452	522	2322	0.8	756	3363
600	183	0.083	124	0.500	12.7	999	4444	626	2785	0.8	920	4092
700	213	0.087	130	0.512	13.0	1189	5290	765	3403	0.8	1108	4929
800	244	0.087	130	0.512	13.0	1253	5572	875	3892	0.8	1247	5547
900	274	0.088	130	0.512	13.0	1569	6981	985	4381	0.8	1431	6365
1000	305	0.088	130	0.512	13.0	1569	6981	1094	4866	0.8	1560	6939
1100	335	0.088	131	0.512	13.0	1823	8108	1206	5365	0.8	1735	7718
1200	366	0.093	139	0.528	13.4	2076	9236	1398	6219	0.8	1979	8803
1300	396	0.093	139	0.528	13.4	2330	10363	1515	6739	0.8	2158	9599
1400	427	0.093	139	0.528	13.4	2456	10927	1632	7259	0.8	2315	10298
1500	457	0.093	139	0.528	13.4	2456	10927	1748	7775	0.8	2450	10898
60 FIBERS												
100	30	0.084	126	0.500	12.7	539	2398	106	472	0.6	197	876
200	61	0.084	126	0.500	12.7	539	2398	211	939	0.7	339	1508
300	91	0.084	126	0.500	12.7	539	2398	317	1410	0.8	469	2086
400	122	0.084	126	0.500	12.7	628	2793	422	1877	0.8	610	2713
500	152	0.085	126	0.500	12.7	809	3599	528	2349	0.8	766	3407
600	183	0.085	126	0.500	12.7	936	4162	634	2820	0.8	914	4066
700	213	0.089	132	0.512	13.0	1126	5008	775	3447	0.8	1102	4902
800	244	0.089	132	0.512	13.0	1316	5854	885	3937	0.8	1265	5627
900	274	0.089	132	0.512	13.0	1569	6981	997	4435	0.8	1439	6401
1000	305	0.089	132	0.512	13.0	1569	6981	1107	4924	0.8	1568	6975
1100	335	0.089	132	0.512	13.0	1823	8108	1221	5431	0.8	1744	7758
1200	366	0.094	140	0.528	13.4	2076	9236	1414	6290	0.8	1989	8848
1300	396	0.094	140	0.528	13.4	2330	10363	1532	6815	0.8	2169	9648
1400	427	0.094	140	0.528	13.4	2330	10363	1650	7340	0.8	2305	10253
1500	457	0.094	140	0.528	13.4	2710	12054	1769	7869	0.8	2507	11152
72 FIBERS												
100	30	0.100	148	0.535	13.6	854	3797	125	556	0.6	235	1045
200	61	0.100	148	0.535	13.6	854	3797	249	1108	0.7	405	1802
300	91	0.100	148	0.535	13.6	854	3797	374	1664	0.7	561	2495
400	122	0.100	148	0.535	13.6	854	3797	499	2220	0.8	709	3154
500	152	0.100	148	0.535	13.6	854	3797	623	2771	0.8	853	3794
600	183	0.100	149	0.535	13.6	1031	4587	748	3327	0.8	1025	4559
700	213	0.108	161	0.559	14.2	1314	5843	949	4221	0.8	1280	5694
800	244	0.108	161	0.559	14.2	1504	6689	1084	4822	0.8	1464	6512
900	274	0.108	161	0.559	14.2	1884	8380	1221	5431	0.8	1677	7460
1000	305	0.108	161	0.559	14.2	1884	8380	1356	6032	0.8	1831	8145
1100	335	0.109	161	0.559	14.2	2011	8943	1492	6637	0.8	2004	8914
1200	366	0.109	162	0.559	14.2	2264	10071	1628	7242	0.8	2198	9777
1300	396	0.109	162	0.559	14.2	2391	10634	1767	7860	0.8	2374	10560
1400	427	0.109	162	0.559	14.2	2644	11762	1903	8465	0.8	2568	11423
1500	457	0.109	162	0.559	14.2	2771	12326	2040	9074	0.8	2741	12193

L I G H T

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NESCLIGHT LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
84 FIBERS												
100	30	0.131	195	0.610	15.5	1296	5763	164	730	0.6	295	1312
200	61	0.131	195	0.610	15.5	1296	5763	328	1459	0.7	512	2277
300	91	0.131	195	0.610	15.5	1296	5763	492	2189	0.8	712	3167
400	122	0.131	195	0.610	15.5	1296	5763	656	2918	0.8	903	4017
500	152	0.131	195	0.610	15.5	1296	5763	820	3648	0.8	1089	4844
600	183	0.131	195	0.610	15.5	1296	5763	984	4377	0.9	1270	5649
700	213	0.131	195	0.610	15.5	1503	6685	1148	5107	0.9	1481	6588
800	244	0.131	195	0.610	15.5	1692	7528	1313	5841	0.9	1689	7513
900	274	0.131	195	0.610	15.5	1946	8655	1477	6570	0.9	1907	8483
1000	305	0.138	205	0.626	15.9	2326	10346	1725	7673	0.9	2216	9857
1100	335	0.138	205	0.626	15.9	2453	10910	1898	8443	0.9	2422	10774
1200	366	0.138	205	0.626	15.9	2706	12037	2071	9212	0.9	2647	11774
1300	396	0.138	206	0.626	15.9	2960	13165	2244	9982	0.9	2872	12775
1400	427	0.138	206	0.626	15.9	3086	13728	2417	10751	0.9	3079	13696
1500	457	0.138	206	0.626	15.9	3340	14856	2590	11521	0.9	3304	14697
96 FIBERS												
100	30	0.132	197	0.610	15.5	1296	5763	165	734	0.6	296	1317
200	61	0.132	197	0.610	15.5	1296	5763	331	1472	0.7	514	2286
300	91	0.132	197	0.610	15.5	1296	5763	496	2206	0.8	715	3180
400	122	0.132	197	0.610	15.5	1296	5763	661	2940	0.8	907	4035
500	152	0.132	197	0.610	15.5	1296	5763	827	3679	0.8	1093	4862
600	183	0.132	197	0.610	15.5	1296	5763	992	4413	0.9	1276	5676
700	213	0.132	197	0.610	15.5	1503	6685	1158	5151	0.9	1488	6619
800	244	0.132	197	0.610	15.5	1756	7810	1324	5889	0.9	1706	7589
900	274	0.132	197	0.610	15.5	1946	8655	1489	6623	0.9	1915	8518
1000	305	0.139	207	0.626	15.9	2326	10346	1738	7731	0.9	2225	9897
1100	335	0.139	207	0.626	15.9	2453	10910	1912	8505	0.9	2433	10823
1200	366	0.139	207	0.626	15.9	2706	12037	2087	9283	0.9	2659	11828
1300	396	0.139	207	0.626	15.9	2960	13165	2261	10057	0.9	2885	12833
1400	427	0.139	207	0.626	15.9	3213	14292	2436	10836	0.9	3111	13838
1500	457	0.139	207	0.626	15.9	3340	14856	2610	11610	0.9	3319	14764
108 FIBERS												
100	30	0.170	254	0.685	17.4	2070	9207	213	947	0.6	371	1650
200	61	0.170	254	0.685	17.4	2070	9207	426	1895	0.7	648	2882
300	91	0.170	254	0.685	17.4	2070	9207	639	2842	0.8	904	4021
400	122	0.170	254	0.685	17.4	2070	9207	852	3790	0.8	1149	5111
500	152	0.170	254	0.685	17.4	2070	9207	1065	4737	0.8	1387	6170
600	183	0.170	254	0.685	17.4	2070	9207	1278	5685	0.9	1621	7211
700	213	0.170	254	0.685	17.4	2070	9207	1491	6632	0.9	1851	8234
800	244	0.170	254	0.685	17.4	2129	9470	1704	7580	0.9	2087	9283
900	274	0.178	264	0.701	17.8	2467	10972	1999	8892	0.9	2430	10809
1000	305	0.178	265	0.701	17.8	2720	12099	2222	9884	0.9	2698	12001
1100	335	0.178	265	0.701	17.8	3100	13790	2447	10885	0.9	2984	13273
1200	366	0.178	265	0.701	17.8	3354	14918	2670	11877	0.9	3252	14466
1300	396	0.178	265	0.701	17.8	3607	16045	2893	12869	0.9	3520	15658
1400	427	0.178	265	0.701	17.8	3860	17172	3117	13865	0.9	3789	16854
1500	457	0.178	265	0.701	17.8	4114	18300	3340	14857	0.9	4057	18046

L I G H T

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC LIGHT LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
120 FIBERS												
100	30	0.171	255	0.685	17.4	2070	9207	214	952	0.6	371	1650
200	61	0.171	255	0.685	17.4	2070	9207	429	1908	0.7	650	2891
300	91	0.171	255	0.685	17.4	2070	9207	643	2860	0.8	906	4030
400	122	0.171	255	0.685	17.4	2070	9207	857	3812	0.8	1152	5124
500	152	0.171	255	0.685	17.4	2070	9207	1072	4768	0.8	1392	6192
600	183	0.171	255	0.685	17.4	2070	9207	1286	5720	0.9	1627	7237
700	213	0.171	255	0.685	17.4	2070	9207	1501	6677	0.9	1858	8265
800	244	0.172	255	0.685	17.4	2129	9470	1715	7629	0.9	2095	9319
900	274	0.179	266	0.701	17.8	2467	10972	2011	8945	0.9	2440	10854
1000	305	0.179	266	0.701	17.8	2720	12099	2235	9942	0.9	2709	12050
1100	335	0.179	266	0.701	17.8	3100	13790	2462	10952	0.9	2995	13322
1200	366	0.179	267	0.701	17.8	3354	14918	2686	11948	0.9	3264	14519
1300	396	0.179	267	0.701	17.8	3607	16045	2911	12949	0.9	3533	15716
1400	427	0.179	267	0.701	17.8	3860	17172	3136	13950	0.9	3803	16917
1500	457	0.179	267	0.701	17.8	4114	18300	3360	14946	0.9	4072	18113
132 FIBERS												
100	30	0.208	310	0.764	19.4	2070	9207	260	1157	0.7	415	1846
200	61	0.208	310	0.764	19.4	2070	9207	520	2313	0.8	734	3265
300	91	0.208	310	0.764	19.4	2070	9207	780	3470	0.8	1031	4586
400	122	0.208	310	0.764	19.4	2070	9207	1040	4626	0.9	1318	5863
500	152	0.208	310	0.764	19.4	2070	9207	1300	5783	0.9	1599	7113
600	183	0.208	310	0.764	19.4	2070	9207	1560	6939	0.9	1875	8340
700	213	0.208	310	0.764	19.4	2188	9734	1821	8100	0.9	2163	9622
800	244	0.208	310	0.764	19.4	2530	11253	2081	9257	0.9	2476	11014
900	274	0.208	310	0.764	19.4	2783	12381	2342	10418	0.9	2778	12357
1000	305	0.216	322	0.780	19.8	3227	14354	2704	12028	0.9	3194	14208
1100	335	0.216	322	0.780	19.8	3607	16045	2975	13233	0.9	3521	15662
1200	366	0.217	322	0.780	19.8	3860	17172	3248	14448	0.9	3835	17059
1300	396	0.217	322	0.780	19.8	4241	18863	3520	15658	0.9	4162	18513
1400	427	0.217	322	0.780	19.8	4494	19991	3792	16868	0.9	4475	19906
1500	457	0.217	323	0.780	19.8	4874	21682	4064	18078	0.9	4802	21360
144 FIBERS												
100	30	0.209	311	0.764	19.4	2070	9207	261	1161	0.7	416	1850
200	61	0.209	311	0.764	19.4	2070	9207	523	2326	0.8	736	3274
300	91	0.209	311	0.764	19.4	2070	9207	784	3487	0.8	1034	4599
400	122	0.209	311	0.764	19.4	2070	9207	1046	4653	0.9	1322	5881
500	152	0.209	311	0.764	19.4	2070	9207	1307	5814	0.9	1604	7135
600	183	0.209	311	0.764	19.4	2070	9207	1568	6975	0.9	1882	8372
700	213	0.209	311	0.764	19.4	2188	9734	1830	8140	0.9	2170	9653
800	244	0.209	311	0.764	19.4	2530	11253	2092	9306	0.9	2484	11049
900	274	0.209	311	0.764	19.4	2847	12663	2354	10471	0.9	2795	12433
1000	305	0.217	324	0.780	19.8	3227	14354	2717	12086	0.9	3205	14257
1100	335	0.217	324	0.780	19.8	3607	16045	2990	13300	0.9	3533	15716
1200	366	0.218	324	0.780	19.8	3860	17172	3265	14523	0.9	3848	17117
1300	396	0.218	324	0.780	19.8	4241	18863	3538	15738	0.9	4176	18576
1400	427	0.218	324	0.780	19.8	4494	19991	3811	16952	0.9	4489	19968
1500	457	0.218	324	0.780	19.8	4874	21682	4084	18167	0.9	4818	21432

L I G H T

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NESSC LIGHT LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
216 FIBERS												
100	30	0.202	301	0.780	19.8	854	3797	253	1125	0.8	353	1570
200	61	0.202	301	0.780	19.8	854	3797	505	2246	0.9	635	2825
300	91	0.202	301	0.780	19.8	913	4060	758	3372	0.9	911	4052
400	122	0.202	301	0.780	19.8	1250	5561	1011	4497	0.9	1219	5422
500	152	0.202	301	0.780	19.8	1630	7252	1264	5623	0.9	1533	6819
600	183	0.202	301	0.780	19.8	1884	8380	1517	6748	0.9	1831	8145
700	213	0.211	313	0.795	20.2	2264	10071	1843	8198	0.9	2208	9822
800	244	0.211	313	0.795	20.2	2517	11198	2106	9368	0.9	2516	11192
900	274	0.211	314	0.795	20.2	2898	12889	2371	10547	0.9	2839	12629
1000	305	0.211	314	0.795	20.2	3151	14017	2634	11717	0.9	3147	13999
1100	335	0.211	314	0.795	20.2	3531	15708	2899	12895	0.9	3470	15435
1200	366	0.211	314	0.795	20.2	3785	16835	3163	14070	0.9	3778	16805
1300	396	0.219	326	0.811	20.6	4292	19090	3564	15853	0.9	4238	18852
1400	427	0.220	327	0.811	20.6	4689	20857	3845	17103	0.9	4577	20360
1500	457	0.220	327	0.811	20.6	5069	22548	4121	18331	0.9	4909	21836
288 FIBERS												
100	30	0.259	385	0.890	22.6	1296	5763	323	1439	0.8	444	1975
200	61	0.259	385	0.890	22.6	1296	5763	647	2878	0.9	802	3569
300	91	0.259	385	0.890	22.6	1296	5763	970	4317	0.9	1146	5096
400	122	0.259	385	0.890	22.6	1566	6964	1294	5757	0.9	1511	6723
500	152	0.259	385	0.890	22.6	2072	9219	1618	7198	0.9	1901	8457
600	183	0.259	385	0.890	22.6	2326	10346	1942	8639	0.9	2265	10077
700	213	0.259	385	0.890	22.6	2706	12037	2267	10082	0.9	2643	11755
800	244	0.259	386	0.890	22.6	3086	13728	2591	11525	0.9	3020	13434
900	274	0.269	400	0.906	23.0	3593	15983	3023	13447	0.9	3507	15602
1000	305	0.269	400	0.906	23.0	3973	17674	3360	14945	0.9	3896	17330
1100	335	0.269	400	0.906	23.0	4354	19365	3697	16444	0.9	4284	19058
1200	366	0.269	400	0.906	23.0	4734	21056	4034	17943	0.9	4673	20787
1300	396	0.268	399	0.921	23.4	5069	22548	4354	19368	0.9	5062	22516
1400	427	0.268	399	0.921	23.4	5576	24803	4691	20865	0.9	5464	24307
1500	457	0.268	399	0.921	23.4	5956	26494	5027	22361	0.9	5854	26039
432 FIBERS												
100	30	0.298	444	0.953	24.2	1296	5763	373	1658	0.8	487	2168
200	61	0.298	444	0.953	24.2	1296	5763	745	3316	0.9	890	3959
300	91	0.298	444	0.953	24.2	1296	5763	1118	4974	0.9	1279	5689
400	122	0.298	444	0.953	24.2	1756	7810	1491	6634	0.9	1708	7598
500	152	0.298	444	0.953	24.2	2326	10346	1865	8295	0.9	2148	9554
600	183	0.298	444	0.953	24.2	2579	11474	2238	9956	0.9	2558	11379
700	213	0.299	444	0.953	24.2	3086	13728	2612	11619	0.9	2992	13310
800	244	0.299	444	0.953	24.2	3466	15419	2986	13281	0.9	3415	15189
900	274	0.309	459	0.969	24.6	3973	17674	3473	15448	0.9	3952	17580
1000	305	0.309	460	0.969	24.6	4480	19929	3860	17170	0.9	4398	19564
1100	335	0.309	460	0.969	24.6	4860	21620	4247	18891	0.9	4832	21496
1200	366	0.320	476	0.984	25.0	5449	24239	4796	21333	0.9	5433	24168
1300	396	0.320	476	0.984	25.0	5956	26494	5197	23118	0.9	5892	26208
1400	427	0.319	474	0.984	25.0	6336	28185	5576	24804	0.9	6321	28118
1500	457	0.319	474	0.984	25.0	6970	31003	5977	26585	0.9	6791	30207

L I G H T

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

M E D I U M												
NESG MEDIUM LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
12 FIBERS												
100	30	0.080	119	0.500	12.7	539	2398	100	446	2.3	242	1074
200	61	0.080	119	0.500	12.7	539	2398	201	892	2.8	406	1807
300	91	0.080	119	0.500	12.7	598	2661	301	1339	0.9	518	2304
400	122	0.080	119	0.500	12.7	746	3320	401	1785	3.0	744	3311
500	152	0.080	120	0.500	12.7	999	4444	502	2232	3.0	946	4206
600	183	0.084	125	0.512	13.0	1189	5290	632	2812	0.9	1055	4694
700	213	0.084	126	0.512	13.0	1569	6981	738	3283	2.9	1387	6168
800	244	0.084	126	0.512	13.0	1569	6981	844	3752	3.0	1536	6834
900	274	0.085	126	0.512	13.0	1823	8108	951	4231	3.0	1742	7751
1000	305	0.090	134	0.528	13.4	2076	9236	1125	5005	1.0	1825	8118
1100	335	0.090	134	0.528	13.4	2203	9799	1238	5506	3.0	2180	9698
1200	366	0.090	134	0.528	13.4	2456	10927	1351	6010	2.9	2391	10634
1300	396	0.090	134	0.528	13.4	2583	11490	1464	6512	3.0	2573	11444
1400	427	0.090	134	0.528	13.4	2837	12618	1577	7016	3.0	2783	12380
1500	457	0.090	134	0.528	13.4	3090	13745	1691	7520	2.9	2994	13316
24 FIBERS												
100	30	0.081	121	0.500	12.7	539	2398	102	452	2.3	242	1078
200	61	0.081	121	0.500	12.7	539	2398	203	904	2.8	408	1813
300	91	0.081	121	0.500	12.7	598	2661	305	1356	0.9	520	2314
400	122	0.081	121	0.500	12.7	776	3452	407	1809	3.0	754	3355
500	152	0.081	121	0.500	12.7	999	4444	508	2262	3.0	950	4224
600	183	0.085	127	0.512	13.0	1189	5290	640	2847	0.9	1060	4714
700	213	0.085	127	0.512	13.0	1569	6981	747	3324	2.9	1392	6192
800	244	0.085	127	0.512	13.0	1696	7545	854	3800	2.9	1571	6986
900	274	0.086	127	0.512	13.0	1823	8108	963	4284	3.0	1750	7782
1000	305	0.091	136	0.528	13.4	2076	9236	1138	5064	1.0	1833	8152
1100	335	0.091	136	0.528	13.4	2203	9799	1252	5571	3.0	2189	9737
1200	366	0.091	136	0.528	13.4	2456	10927	1367	6080	2.9	2400	10676
1300	396	0.091	136	0.528	13.4	2583	11490	1481	6588	3.0	2583	11490
1400	427	0.091	136	0.528	13.4	2837	12618	1596	7098	2.9	2794	12430
1500	457	0.091	136	0.528	13.4	3090	13745	1710	7608	2.9	3006	13369
36 FIBERS												
100	30	0.082	123	0.500	12.7	539	2398	103	458	2.3	243	1081
200	61	0.082	123	0.500	12.7	598	2661	206	916	2.7	420	1868
300	91	0.082	123	0.500	12.7	598	2661	309	1375	3.0	572	2544
400	122	0.082	123	0.500	12.7	776	3452	412	1833	3.0	757	3367
500	152	0.082	123	0.500	12.7	999	4444	515	2291	3.0	953	4239
600	183	0.086	129	0.512	13.0	1189	5290	648	2882	3.0	1164	5178
700	213	0.086	129	0.512	13.0	1506	6699	756	3363	2.9	1384	6156
800	244	0.087	129	0.512	13.0	1823	8108	867	3857	2.9	1604	7135
900	274	0.087	129	0.512	13.0	1823	8108	975	4337	2.9	1757	7816
1000	305	0.092	137	0.528	13.4	2076	9236	1152	5124	2.9	2014	8959
1100	335	0.092	137	0.528	13.4	2456	10927	1268	5640	2.9	2252	10017
1200	366	0.092	137	0.528	13.4	2456	10927	1383	6152	2.9	2410	10720
1300	396	0.092	137	0.528	13.4	2710	12054	1499	6668	2.9	2621	11659
1400	427	0.092	137	0.528	13.4	2837	12618	1614	7179	2.9	2806	12482
1500	457	0.092	137	0.528	13.4	3090	13745	1730	7695	2.9	3017	13420

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

M E D I U M												
NESC MEDIUM LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
48 FIBERS												
100	30	0.083	124	0.500	12.7	539	2398	104	463	2.3	244	1085
200	61	0.083	124	0.500	12.7	598	2661	209	930	2.7	421	1873
300	91	0.083	124	0.500	12.7	598	2661	313	1392	3.0	574	2553
400	122	0.083	124	0.500	12.7	776	3452	417	1855	3.0	761	3385
500	152	0.083	124	0.500	12.7	999	4444	522	2322	3.0	957	4257
600	183	0.087	130	0.512	13.0	1189	5290	656	2918	3.0	1169	5200
700	213	0.088	130	0.512	13.0	1506	6699	766	3407	2.9	1390	6183
800	244	0.088	131	0.512	13.0	1823	8108	877	3901	2.9	1610	7162
900	274	0.088	131	0.512	13.0	1823	8108	987	4390	2.9	1764	7847
1000	305	0.093	139	0.528	13.4	2076	9236	1165	5182	1.0	1848	8220
1100	335	0.093	139	0.528	13.4	2456	10927	1282	5703	2.9	2261	10057
1200	366	0.093	139	0.528	13.4	2456	10927	1399	6223	2.9	2419	10760
1300	396	0.093	139	0.528	13.4	2710	12054	1516	6744	2.9	2632	11708
1400	427	0.093	139	0.528	13.4	2963	13182	1633	7264	2.9	2844	12651
1500	457	0.093	139	0.528	13.4	3090	13745	1750	7784	2.9	3029	13474
60 FIBERS												
100	30	0.084	126	0.500	12.7	539	2398	106	472	2.3	244	1085
200	61	0.084	126	0.500	12.7	539	2398	211	939	2.8	412	1833
300	91	0.084	126	0.500	12.7	598	2661	317	1410	3.0	576	2562
400	122	0.085	126	0.500	12.7	776	3452	423	1882	3.0	764	3398
500	152	0.085	126	0.500	12.7	999	4444	528	2349	3.0	961	4275
600	183	0.089	132	0.512	13.0	1189	5290	664	2954	3.0	1174	5222
700	213	0.089	132	0.512	13.0	1379	6135	775	3447	3.0	1368	6085
800	244	0.089	132	0.512	13.0	1569	6981	886	3941	3.0	1562	6948
900	274	0.089	132	0.512	13.0	1823	8108	999	4444	2.9	1771	7878
1000	305	0.094	140	0.528	13.4	2076	9236	1178	5240	2.9	2030	9030
1100	335	0.094	140	0.528	13.4	2330	10363	1296	5765	2.9	2243	9977
1200	366	0.094	140	0.528	13.4	2456	10927	1414	6290	2.9	2429	10805
1300	396	0.094	140	0.528	13.4	2710	12054	1533	6819	2.9	2642	11752
1400	427	0.094	140	0.528	13.4	2963	13182	1652	7348	2.9	2856	12704
1500	457	0.094	140	0.528	13.4	3090	13745	1770	7873	2.9	3042	13531
72 FIBERS												
100	30	0.100	148	0.535	13.6	854	3797	125	556	2.1	290	1290
200	61	0.100	148	0.535	13.6	854	3797	249	1108	2.5	489	2175
300	91	0.100	148	0.535	13.6	854	3797	374	1664	2.7	668	2971
400	122	0.100	148	0.535	13.6	854	3797	499	2220	2.9	836	3719
500	152	0.100	149	0.535	13.6	1061	4719	624	2776	2.9	1044	4644
600	183	0.108	161	0.559	14.2	1314	5843	813	3616	2.9	1310	5827
700	213	0.108	161	0.559	14.2	1567	6970	949	4221	2.9	1536	6832
800	244	0.108	161	0.559	14.2	1884	8380	1085	4826	2.8	1775	7896
900	274	0.109	161	0.559	14.2	2011	8943	1221	5431	2.9	1975	8785
1000	305	0.109	162	0.559	14.2	2264	10071	1357	6036	2.8	2201	9791
1100	335	0.109	162	0.559	14.2	2517	11198	1495	6650	2.8	2428	10800
1200	366	0.109	162	0.559	14.2	2644	11762	1631	7255	2.9	2628	11690
1300	396	0.109	162	0.559	14.2	2898	12889	1768	7864	2.9	2854	12695
1400	427	0.109	162	0.559	14.2	3151	14017	1905	8474	2.8	3080	13701
1500	457	0.115	171	0.575	14.6	3405	15144	2153	9577	2.8	3392	15088

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

M E D I U M												
NESC MEDIUM LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
84 FIBERS												
100	30	0.131	195	0.610	15.5	1296	5763	164	730	1.9	354	1575
200	61	0.131	195	0.610	15.5	1296	5763	328	1459	2.3	602	2678
300	91	0.131	195	0.610	15.5	1296	5763	492	2189	2.5	826	3674
400	122	0.131	195	0.610	15.5	1296	5763	656	2918	2.6	1037	4613
500	152	0.131	195	0.610	15.5	1296	5763	820	3648	2.7	1240	5516
600	183	0.131	195	0.610	15.5	1473	6554	984	4377	2.8	1473	6552
700	213	0.131	195	0.610	15.5	1756	7810	1149	5111	2.8	1726	7678
800	244	0.131	195	0.610	15.5	2009	8937	1313	5841	2.8	1973	8776
900	274	0.138	205	0.626	15.9	2326	10346	1552	6904	2.7	2291	10191
1000	305	0.138	205	0.626	15.9	2579	11474	1725	7673	2.7	2545	11321
1100	335	0.138	205	0.626	15.9	2833	12601	1898	8443	2.7	2799	12451
1200	366	0.138	206	0.626	15.9	3086	13728	2072	9217	2.7	3053	13580
1300	396	0.138	206	0.626	15.9	3340	14856	2245	9986	2.7	3307	14710
1400	427	0.138	206	0.626	15.9	3593	15983	2418	10756	2.7	3562	15845
1500	457	0.145	216	0.642	16.3	3973	17674	2716	12081	2.7	3938	17517
96 FIBERS												
100	30	0.132	197	0.610	15.5	1296	5763	165	734	1.9	354	1575
200	61	0.132	197	0.610	15.5	1296	5763	331	1472	2.3	604	2687
300	91	0.132	197	0.610	15.5	1296	5763	496	2206	2.5	829	3688
400	122	0.132	197	0.610	15.5	1296	5763	661	2940	2.6	1041	4631
500	152	0.132	197	0.610	15.5	1296	5763	827	3679	2.7	1245	5538
600	183	0.132	197	0.610	15.5	1503	6685	992	4413	2.8	1484	6601
700	213	0.132	197	0.610	15.5	1756	7810	1158	5151	2.8	1732	7704
800	244	0.132	197	0.610	15.5	2009	8937	1324	5889	2.8	1980	8807
900	274	0.139	207	0.626	15.9	2326	10346	1564	6957	2.7	2299	10226
1000	305	0.139	207	0.626	15.9	2706	12037	1739	7735	2.7	2577	11463
1100	335	0.139	207	0.626	15.9	2833	12601	1913	8509	2.7	2809	12495
1200	366	0.139	207	0.626	15.9	3086	13728	2088	9288	2.7	3064	13629
1300	396	0.139	207	0.626	15.9	3340	14856	2262	10062	2.7	3319	14764
1400	427	0.139	207	0.626	15.9	3593	15983	2437	10840	2.7	3574	15898
1500	457	0.146	217	0.642	16.3	3973	17674	2737	12175	2.7	3952	17579
108 FIBERS												
100	30	0.170	254	0.685	17.4	2070	9207	213	947	1.8	436	1939
200	61	0.170	254	0.685	17.4	2070	9207	426	1895	2.0	748	3327
300	91	0.170	254	0.685	17.4	2070	9207	639	2842	2.2	1030	4582
400	122	0.170	254	0.685	17.4	2070	9207	852	3790	2.4	1297	5769
500	152	0.170	254	0.685	17.4	2070	9207	1065	4737	2.5	1554	6913
600	183	0.170	254	0.685	17.4	2070	9207	1278	5685	2.5	1805	8029
700	213	0.170	254	0.685	17.4	2070	9207	1491	6632	2.6	2050	9119
800	244	0.170	254	0.685	17.4	2340	10408	1704	7580	2.6	2339	10404
900	274	0.178	265	0.701	17.8	2720	12099	2000	8896	2.6	2713	12068
1000	305	0.178	265	0.701	17.8	3100	13790	2225	9897	2.6	3029	13474
1100	335	0.178	265	0.701	17.8	3354	14918	2448	10889	2.6	3323	14781
1200	366	0.178	265	0.701	17.8	3734	16609	2671	11881	2.6	3638	16183
1300	396	0.178	265	0.701	17.8	3987	17736	2894	12873	2.6	3933	17495
1400	427	0.186	276	0.717	18.2	4367	19427	3248	14448	2.6	4355	19372
1500	457	0.186	276	0.717	18.2	4748	21118	3481	15484	2.6	4678	20809

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC MEDIUM LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION					
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED			
								LBS	N	SAG %	LBS	N	
120 FIBERS													
100	30	0.171	255	0.685	17.4	2070	9207	214	952	1.8	437	1944	
200	61	0.171	255	0.685	17.4	2070	9207	429	1908	2.0	749	3332	
300	91	0.171	255	0.685	17.4	2070	9207	643	2860	2.2	1033	4595	
400	122	0.171	255	0.685	17.4	2070	9207	857	3812	2.4	1301	5787	
500	152	0.171	255	0.685	17.4	2070	9207	1072	4768	2.5	1559	6935	
600	183	0.171	255	0.685	17.4	2070	9207	1286	5720	2.5	1810	8051	
700	213	0.171	255	0.685	17.4	2070	9207	1501	6677	2.6	2057	9150	
800	244	0.179	266	0.701	17.8	2467	10972	1788	7953	2.6	2427	10796	
900	274	0.179	266	0.701	17.8	2783	12381	2012	8950	2.6	2732	12153	
1000	305	0.179	266	0.701	17.8	3100	13790	2238	9955	2.6	3039	13518	
1100	335	0.179	267	0.701	17.8	3354	14918	2463	10956	2.6	3334	14830	
1200	366	0.179	267	0.701	17.8	3734	16609	2687	11952	2.6	3650	16236	
1300	396	0.179	267	0.701	17.8	4114	18300	2912	12953	2.6	3966	17642	
1400	427	0.187	278	0.717	18.2	4621	20554	3267	14532	2.5	4409	19612	
1500	457	0.187	278	0.717	18.2	4748	21118	3501	15573	2.6	4693	20876	
M E D I U M	132 FIBERS												
	100	30	0.208	310	0.764	19.4	2070	9207	260	1157	1.8	476	2117
	200	61	0.208	310	0.764	19.4	2070	9207	520	2313	2.1	826	3674
	300	91	0.208	310	0.764	19.4	2070	9207	780	3470	2.2	1146	5098
	400	122	0.208	310	0.764	19.4	2070	9207	1040	4626	2.3	1451	6454
	500	152	0.208	310	0.764	19.4	2070	9207	1300	5783	2.4	1748	7775
	600	183	0.208	310	0.764	19.4	2070	9207	1560	6939	2.5	2038	9065
	700	213	0.208	310	0.764	19.4	2467	10972	1821	8100	2.5	2386	10613
	800	244	0.208	310	0.764	19.4	2720	12099	2081	9257	2.5	2712	12064
	900	274	0.216	322	0.780	19.8	3227	14354	2433	10823	2.5	3153	14025
	1000	305	0.216	322	0.780	19.8	3607	16045	2704	12028	2.5	3507	15600
	1100	335	0.217	322	0.780	19.8	3860	17172	2978	13247	2.5	3844	17099
	1200	366	0.217	322	0.780	19.8	4241	18863	3249	14452	2.5	4198	18674
	1300	396	0.217	322	0.780	19.8	4621	20554	3521	15662	2.5	4553	20253
	1400	427	0.217	323	0.780	19.8	5001	22246	3793	16872	2.5	4908	21832
1500	457	0.225	335	0.795	20.2	5508	24500	4220	18771	2.4	5411	24069	
M E D I U M	144 FIBERS												
	100	30	0.209	311	0.764	19.4	2070	9207	261	1161	1.8	477	2122
	200	61	0.209	311	0.764	19.4	2070	9207	523	2326	2.1	827	3679
	300	91	0.209	311	0.764	19.4	2070	9207	784	3487	2.2	1149	5111
	400	122	0.209	311	0.764	19.4	2070	9207	1046	4653	2.3	1455	6472
	500	152	0.209	311	0.764	19.4	2070	9207	1307	5814	2.4	1753	7798
	600	183	0.209	311	0.764	19.4	2070	9207	1568	6975	2.5	2044	9092
	700	213	0.209	311	0.764	19.4	2467	10972	1830	8140	2.5	2393	10645
	800	244	0.209	311	0.764	19.4	2783	12381	2093	9310	2.5	2730	12144
	900	274	0.217	324	0.780	19.8	3227	14354	2446	10880	2.5	3162	14065
	1000	305	0.217	324	0.780	19.8	3607	16045	2718	12090	2.5	3517	15644
	1100	335	0.218	324	0.780	19.8	3860	17172	2993	13314	2.5	3855	17148
	1200	366	0.218	324	0.780	19.8	4241	18863	3266	14528	2.5	4211	18731
	1300	396	0.218	324	0.780	19.8	4621	20554	3539	15742	2.5	4566	20311
	1400	427	0.218	324	0.780	19.8	5001	22246	3812	16957	2.5	4922	21894
1500	457	0.226	337	0.795	20.2	5508	24500	4241	18865	2.4	5427	24140	

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

M E D I U M												
NESG MEDIUM LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
216 FIBERS												
100	30	0.202	301	0.780	19.8	854	3797	253	1125	2.1	394	1753
200	61	0.202	301	0.780	19.8	854	3797	505	2246	2.4	694	3087
300	91	0.202	301	0.780	19.8	1002	4455	758	3372	2.5	1000	4448
400	122	0.202	301	0.780	19.8	1377	6125	1011	4497	2.5	1341	5965
500	152	0.202	301	0.780	19.8	1884	8380	1264	5623	2.5	1701	7566
600	183	0.202	301	0.780	19.8	2011	8943	1518	6752	2.5	2003	8910
700	213	0.211	313	0.795	20.2	2517	11198	1843	8198	2.5	2423	10778
800	244	0.211	314	0.795	20.2	2771	12326	2107	9372	2.5	2754	12250
900	274	0.211	314	0.795	20.2	3151	14017	2371	10547	2.5	3104	13807
1000	305	0.211	314	0.795	20.2	3658	16271	2636	11726	2.5	3473	15449
1100	335	0.211	314	0.795	20.2	3785	16835	2899	12895	2.5	3784	16832
1200	366	0.219	326	0.811	20.6	4292	19090	3290	14635	2.5	4259	18945
1300	396	0.220	327	0.811	20.6	4689	20857	3570	15880	2.5	4624	20569
1400	427	0.220	327	0.811	20.6	5069	22548	3846	17108	2.5	4984	22170
1500	457	0.220	327	0.811	20.6	5576	24803	4125	18349	2.5	5364	23860
288 FIBERS												
100	30	0.259	385	0.890	22.6	1296	5763	323	1439	2.0	488	2172
200	61	0.259	385	0.890	22.6	1296	5763	647	2878	2.2	866	3851
300	91	0.259	385	0.890	22.6	1296	5763	970	4317	2.4	1222	5437
400	122	0.259	385	0.890	22.6	1692	7528	1294	5757	2.4	1625	7229
500	152	0.259	385	0.890	22.6	2072	9219	1618	7198	2.4	2026	9013
600	183	0.259	385	0.890	22.6	2579	11474	1943	8641	2.4	2444	10872
700	213	0.259	386	0.890	22.6	2833	12601	2267	10083	2.4	2828	12580
800	244	0.259	386	0.890	22.6	3340	14856	2593	11534	2.4	3248	14447
900	274	0.269	400	0.906	23.0	3847	17111	3024	13450	2.4	3757	16710
1000	305	0.269	400	0.906	23.0	4227	18802	3360	14948	2.4	4168	18542
1100	335	0.269	400	0.906	23.0	4734	21056	3698	16448	2.4	4597	20450
1200	366	0.268	399	0.921	23.4	5069	22548	4019	17879	2.4	5002	22252
1300	396	0.268	399	0.921	23.4	5449	24239	4355	19373	2.4	5415	24085
1400	427	0.268	399	0.921	23.4	5829	25930	4692	20869	2.4	5827	25918
1500	457	0.267	397	0.921	23.4	6336	28185	5005	22265	2.4	6239	27750
432 FIBERS												
100	30	0.298	444	0.953	24.2	1296	5763	373	1658	2.0	529	2355
200	61	0.298	444	0.953	24.2	1296	5763	745	3316	2.2	949	4221
300	91	0.298	444	0.953	24.2	1384	6158	1118	4974	2.3	1360	6050
400	122	0.298	444	0.953	24.2	1819	8091	1491	6634	2.3	1811	8054
500	152	0.298	444	0.953	24.2	2326	10346	1865	8295	2.3	2270	10098
600	183	0.298	444	0.953	24.2	2833	12601	2238	9957	2.3	2730	12143
700	213	0.299	444	0.953	24.2	3340	14856	2612	11620	2.3	3190	14188
800	244	0.309	459	0.969	24.6	3973	17674	3087	13732	2.3	3752	16689
900	274	0.309	459	0.969	24.6	4227	18802	3473	15451	2.3	4192	18648
1000	305	0.309	460	0.969	24.6	4734	21056	3861	17172	2.3	4663	20744
1100	335	0.320	476	0.984	25.0	5322	23675	4396	19554	2.3	5273	23456
1200	366	0.320	476	0.984	25.0	5829	25930	4797	21338	2.3	5756	25605
1300	396	0.319	474	0.984	25.0	6336	28185	5178	23032	2.3	6223	27683
1400	427	0.319	474	0.984	25.0	6716	29876	5577	24809	2.3	6690	29760
1500	457	0.319	474	0.984	25.0	7223	32131	5977	26589	2.3	7173	31906

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC HEAVY LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
12 FIBERS												
100	30	0.080	119	0.500	12.7	539	2398	100	446	3.5	335	1492
200	61	0.080	119	0.500	12.7	598	2661	201	892	4.1	569	2533
300	91	0.080	119	0.500	12.7	936	4162	301	1339	4.1	864	3844
400	122	0.084	125	0.512	13.0	1189	5290	421	1875	4.2	1152	5125
500	152	0.084	126	0.512	13.0	1506	6699	527	2345	4.1	1445	6429
600	183	0.085	126	0.512	13.0	1823	8108	634	2821	4.1	1739	7737
700	213	0.090	134	0.528	13.4	2076	9236	788	3503	4.1	2052	9127
800	244	0.090	134	0.528	13.4	2456	10927	901	4006	4.1	2367	10530
900	274	0.090	134	0.528	13.4	2710	12054	1014	4509	4.1	2649	11785
1000	305	0.090	134	0.528	13.4	2963	13182	1127	5012	4.1	2931	13040
1100	335	0.093	138	0.535	13.6	3344	14873	1278	5687	4.1	3276	14572
1200	366	0.093	138	0.535	13.6	3597	16000	1395	6207	4.1	3561	15839
1300	396	0.102	151	0.559	14.2	4104	18255	1652	7349	4.1	4017	17869
1400	427	0.102	152	0.559	14.2	4309	19166	1783	7933	4.1	4300	19125
1500	457	0.102	152	0.559	14.2	4689	20857	1915	8517	4.1	4628	20585
24 FIBERS												
100	30	0.081	121	0.500	12.7	539	2398	102	452	3.5	336	1495
200	61	0.081	121	0.500	12.7	598	2661	203	904	4.1	571	2539
300	91	0.081	121	0.500	12.7	936	4162	305	1357	4.1	866	3853
400	122	0.085	127	0.512	13.0	1189	5290	427	1898	4.1	1155	5137
500	152	0.085	127	0.512	13.0	1506	6699	534	2374	4.1	1449	6445
600	183	0.086	127	0.512	13.0	1823	8108	642	2856	4.1	1743	7755
700	213	0.091	136	0.528	13.4	2076	9236	797	3545	4.1	2057	9149
800	244	0.091	136	0.528	13.4	2456	10927	911	4054	4.1	2373	10555
900	274	0.091	136	0.528	13.4	2837	12618	1026	4563	4.1	2689	11960
1000	305	0.091	136	0.528	13.4	2963	13182	1140	5071	4.1	2938	13071
1100	335	0.094	140	0.535	13.6	3344	14873	1293	5752	4.1	3284	14606
1200	366	0.094	140	0.535	13.6	3724	16564	1411	6278	4.1	3602	16025
1300	396	0.103	153	0.559	14.2	4231	18819	1670	7427	4.0	4059	18055
1400	427	0.103	153	0.559	14.2	4435	19729	1802	8017	4.1	4343	19317
1500	457	0.103	154	0.559	14.2	4689	20857	1935	8605	4.1	4638	20633
36 FIBERS												
100	30	0.082	123	0.500	12.7	539	2398	103	458	3.5	337	1499
200	61	0.082	123	0.500	12.7	598	2661	206	916	4.1	572	2544
300	91	0.082	123	0.500	12.7	936	4162	309	1375	4.1	868	3861
400	122	0.086	129	0.512	13.0	1189	5290	432	1922	4.1	1158	5151
500	152	0.086	129	0.512	13.0	1506	6699	540	2402	4.1	1452	6459
600	183	0.087	129	0.512	13.0	1823	8108	650	2891	4.1	1748	7775
700	213	0.092	137	0.528	13.4	2076	9236	806	3585	4.1	2062	9172
800	244	0.092	137	0.528	13.4	2456	10927	922	4101	4.1	2379	10582
900	274	0.092	137	0.528	13.4	2710	12054	1038	4617	4.1	2662	11841
1000	305	0.092	137	0.528	13.4	3090	13745	1154	5133	4.1	2979	13251
1100	335	0.095	142	0.535	13.6	3470	15436	1308	5818	4.1	3324	14786
1200	366	0.095	142	0.535	13.6	3597	16000	1427	6348	4.1	3578	15916
1300	396	0.104	154	0.559	14.2	4104	18255	1687	7504	4.1	4036	17953
1400	427	0.104	155	0.559	14.2	4435	19729	1821	8100	4.1	4353	19363
1500	457	0.104	155	0.559	14.2	4689	20857	1954	8692	4.1	4649	20680

HEAVY

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC HEAVY LOADING @ 1% INSTALLATION SAG												
SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
48 FIBERS												
100	30	0.083	124	0.500	12.7	539	2398	104	463	3.5	338	1503
200	61	0.083	124	0.500	12.7	598	2661	209	930	4.1	574	2553
300	91	0.083	124	0.500	12.7	936	4162	313	1392	4.1	870	3870
400	122	0.087	130	0.512	13.0	1189	5290	437	1944	4.1	1160	5160
500	152	0.088	130	0.512	13.0	1506	6699	547	2433	4.1	1456	6477
600	183	0.088	131	0.512	13.0	1823	8108	658	2927	4.1	1752	7793
700	213	0.093	139	0.528	13.4	2076	9236	815	3625	4.1	2067	9194
800	244	0.093	139	0.528	13.4	2456	10927	932	4146	4.1	2384	10605
900	274	0.093	139	0.528	13.4	2710	12054	1049	4666	4.1	2668	11868
1000	305	0.093	139	0.528	13.4	3090	13745	1167	5191	4.1	2986	13282
1100	335	0.096	143	0.535	13.6	3470	15436	1322	5881	4.1	3332	14821
1200	366	0.096	143	0.535	13.6	3724	16564	1443	6419	4.1	3620	16103
1300	396	0.105	156	0.559	14.2	4104	18255	1704	7580	4.1	4045	17993
1400	427	0.105	156	0.559	14.2	4435	19729	1839	8180	4.1	4363	19408
1500	457	0.105	157	0.559	14.2	4689	20857	1974	8781	4.1	4660	20729
60 FIBERS												
100	30	0.084	126	0.500	12.7	539	2398	106	472	3.5	338	1503
200	61	0.084	126	0.500	12.7	598	2661	211	939	4.1	575	2558
300	91	0.085	126	0.500	12.7	936	4162	317	1410	4.1	872	3879
400	122	0.089	132	0.512	13.0	1189	5290	443	1971	4.1	1163	5173
500	152	0.089	132	0.512	13.0	1569	6981	554	2464	4.1	1476	6566
600	183	0.089	132	0.512	13.0	1823	8108	666	2963	4.1	1756	7811
700	213	0.094	140	0.528	13.4	2076	9236	825	3670	4.1	2072	9217
800	244	0.094	140	0.528	13.4	2456	10927	943	4195	4.1	2390	10631
900	274	0.094	140	0.528	13.4	2710	12054	1061	4720	4.1	2675	11899
1000	305	0.094	140	0.528	13.4	2963	13182	1180	5249	4.1	2960	13167
1100	335	0.097	145	0.535	13.6	3344	14873	1337	5947	4.1	3307	14710
1200	366	0.097	145	0.535	13.6	3597	16000	1459	6490	4.1	3595	15991
1300	396	0.106	158	0.559	14.2	4104	18255	1721	7655	4.1	4055	18038
1400	427	0.106	158	0.559	14.2	4435	19729	1858	8265	4.0	4373	19452
1500	457	0.106	158	0.559	14.2	4689	20857	1994	8870	4.1	4671	20778
72 FIBERS												
100	30	0.100	148	0.535	13.6	854	3797	125	556	3.1	400	1779
200	61	0.100	148	0.535	13.6	854	3797	249	1108	3.7	662	2945
300	91	0.100	148	0.535	13.6	913	4060	374	1664	4.1	907	4035
400	122	0.108	161	0.559	14.2	1314	5843	542	2411	4.0	1267	5636
500	152	0.108	161	0.559	14.2	1567	6970	678	3016	4.0	1565	6961
600	183	0.108	161	0.559	14.2	1884	8380	814	3621	4.0	1879	8358
700	213	0.109	162	0.559	14.2	2264	10071	950	4226	4.0	2210	9831
800	244	0.109	162	0.559	14.2	2644	11762	1088	4840	4.0	2541	11303
900	274	0.109	162	0.559	14.2	2898	12889	1224	5445	4.0	2839	12629
1000	305	0.109	162	0.559	14.2	3151	14017	1361	6054	4.0	3138	13959
1100	335	0.115	171	0.575	14.6	3531	15708	1579	7024	4.0	3531	15707
1200	366	0.115	171	0.575	14.6	3911	17399	1723	7664	4.0	3867	17201
1300	396	0.115	171	0.575	14.6	4292	19090	1870	8318	4.0	4205	18705
1400	427	0.115	171	0.575	14.6	4545	20217	2015	8963	4.0	4509	20057
1500	457	0.123	183	0.594	15.1	5069	22548	2308	10266	3.9	4994	22214

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC HEAVY LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
84 FIBERS												
100	30	0.131	195	0.610	15.5	1296	5763	164	730	2.8	483	2148
200	61	0.131	195	0.610	15.5	1296	5763	328	1459	3.3	803	3572
300	91	0.131	195	0.610	15.5	1296	5763	492	2189	3.7	1085	4826
400	122	0.131	195	0.610	15.5	1384	6158	656	2918	3.9	1369	6090
500	152	0.131	195	0.610	15.5	1756	7810	821	3652	3.9	1718	7642
600	183	0.131	195	0.610	15.5	2072	9219	985	4381	3.9	2053	9132
700	213	0.138	205	0.626	15.9	2453	10910	1208	5373	3.9	2448	10889
800	244	0.138	205	0.626	15.9	2833	12601	1381	6143	3.9	2806	12482
900	274	0.138	206	0.626	15.9	3213	14292	1554	6913	3.9	3163	14070
1000	305	0.138	206	0.626	15.9	3593	15983	1727	7682	3.9	3521	15662
1100	335	0.145	216	0.642	16.3	3973	17674	1992	8861	3.9	3948	17562
1200	366	0.145	216	0.642	16.3	4354	19365	2174	9670	3.8	4312	19181
1300	396	0.145	216	0.642	16.3	4734	21056	2356	10480	3.8	4676	20800
1400	427	0.148	220	0.661	16.8	5196	23112	2587	11508	3.8	5115	22753
1500	457	0.148	220	0.661	16.8	5576	24803	2773	12335	3.8	5483	24390
96 FIBERS												
100	30	0.132	197	0.610	15.5	1296	5763	165	734	2.8	483	2148
200	61	0.132	197	0.610	15.5	1296	5763	331	1472	3.3	805	3581
300	91	0.132	197	0.610	15.5	1296	5763	496	2206	3.7	1088	4840
400	122	0.132	197	0.610	15.5	1384	6158	662	2945	3.9	1372	6103
500	152	0.132	197	0.610	15.5	1756	7810	827	3679	3.9	1722	7660
600	183	0.132	197	0.610	15.5	2072	9219	993	4417	3.9	2058	9154
700	213	0.139	207	0.626	15.9	2579	11474	1217	5413	3.8	2484	11049
800	244	0.139	207	0.626	15.9	2833	12601	1391	6187	3.9	2812	12508
900	274	0.139	207	0.626	15.9	3213	14292	1566	6966	3.9	3170	14101
1000	305	0.139	207	0.626	15.9	3593	15983	1741	7744	3.9	3528	15693
1100	335	0.146	217	0.642	16.3	3973	17674	2007	8928	3.8	3957	17602
1200	366	0.146	217	0.642	16.3	4480	19929	2191	9746	3.8	4352	19359
1300	396	0.146	217	0.642	16.3	4734	21056	2374	10560	3.8	4686	20844
1400	427	0.149	222	0.661	16.8	5196	23112	2606	11592	3.8	5126	22802
1500	457	0.149	222	0.661	16.8	5576	24803	2793	12424	3.8	5495	24443
108 FIBERS												
100	30	0.170	254	0.685	17.4	2070	9207	213	947	2.5	589	2620
200	61	0.170	254	0.685	17.4	2070	9207	426	1895	2.9	986	4386
300	91	0.170	254	0.685	17.4	2070	9207	639	2842	3.3	1337	5947
400	122	0.170	254	0.685	17.4	2070	9207	852	3790	3.5	1662	7393
500	152	0.170	254	0.685	17.4	2070	9207	1065	4737	3.7	1972	8772
600	183	0.170	254	0.685	17.4	2340	10408	1278	5685	3.7	2334	10382
700	213	0.178	265	0.701	17.8	2847	12663	1556	6921	3.7	2799	12451
800	244	0.178	265	0.701	17.8	3227	14354	1780	7918	3.7	3195	14212
900	274	0.178	265	0.701	17.8	3607	16045	2003	8910	3.7	3589	15965
1000	305	0.178	265	0.701	17.8	3987	17736	2226	9902	3.7	3984	17722
1100	335	0.186	276	0.717	18.2	4494	19991	2552	11352	3.7	4487	19959
1200	366	0.186	276	0.717	18.2	5001	22246	2785	12388	3.7	4917	21872
1300	396	0.186	276	0.717	18.2	5381	23937	3019	13429	3.7	5320	23665
1400	427	0.186	277	0.717	18.2	5761	25628	3252	14466	3.7	5722	25453
1500	457	0.188	279	0.748	19.0	6336	28185	3518	15649	3.7	6235	27735

* Initial tension indicates tension before 10 year creep.

All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC HEAVY LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
120 FIBERS												
100	30	0.171	255	0.685	17.4	2070	9207	214	952	2.5	590	2624
200	61	0.171	255	0.685	17.4	2070	9207	429	1908	2.9	988	4395
300	91	0.171	255	0.685	17.4	2070	9207	643	2860	3.3	1339	5956
400	122	0.171	255	0.685	17.4	2070	9207	857	3812	3.5	1666	7411
500	152	0.171	255	0.685	17.4	2070	9207	1072	4768	3.7	1976	8790
600	183	0.172	255	0.685	17.4	2340	10408	1287	5725	3.7	2339	10404
700	213	0.179	266	0.701	17.8	2847	12663	1565	6961	3.7	2805	12477
800	244	0.179	266	0.701	17.8	3227	14354	1791	7967	3.7	3201	14239
900	274	0.179	267	0.701	17.8	3607	16045	2015	8963	3.7	3597	16000
1000	305	0.179	267	0.701	17.8	4114	18300	2240	9964	3.7	4021	17886
1100	335	0.187	278	0.717	18.2	4621	20554	2567	11419	3.6	4524	20124
1200	366	0.187	278	0.717	18.2	5001	22246	2802	12464	3.6	4928	21921
1300	396	0.187	278	0.717	18.2	5381	23937	3036	13505	3.7	5331	23713
1400	427	0.187	278	0.717	18.2	5761	25628	3271	14550	3.7	5734	25506
1500	457	0.189	281	0.748	19.0	6336	28185	3539	15742	3.7	6247	27788
132 FIBERS												
100	30	0.208	310	0.764	19.4	2070	9207	260	1157	2.5	631	2807
200	61	0.208	310	0.764	19.4	2070	9207	520	2313	2.9	1064	4733
300	91	0.208	310	0.764	19.4	2070	9207	780	3470	3.2	1450	6450
400	122	0.208	310	0.764	19.4	2070	9207	1040	4626	3.5	1811	8056
500	152	0.208	310	0.764	19.4	2188	9734	1300	5783	3.6	2183	9710
600	183	0.208	310	0.764	19.4	2657	11817	1561	6944	3.6	2626	11681
700	213	0.216	322	0.780	19.8	3227	14354	1893	8420	3.5	3147	13999
800	244	0.216	322	0.780	19.8	3607	16045	2164	9626	3.5	3580	15925
900	274	0.217	322	0.780	19.8	4114	18300	2437	10840	3.5	4041	17975
1000	305	0.217	322	0.780	19.8	4494	19991	2708	12046	3.5	4474	19901
1100	335	0.217	323	0.780	19.8	5001	22246	2980	13256	3.5	4935	21952
1200	366	0.225	335	0.795	20.2	5508	24500	3376	15017	3.5	5493	24434
1300	396	0.221	328	0.811	20.6	5956	26494	3584	15942	3.5	5921	26338
1400	427	0.220	327	0.811	20.6	6463	28749	3844	17099	3.5	6377	28366
1500	457	0.220	327	0.811	20.6	6843	30440	4120	18327	3.6	6816	30319
144 FIBERS												
100	30	0.209	311	0.764	19.4	2070	9207	261	1161	2.5	632	2811
200	61	0.209	311	0.764	19.4	2070	9207	523	2326	2.9	1065	4737
300	91	0.209	311	0.764	19.4	2070	9207	784	3487	3.2	1452	6459
400	122	0.209	311	0.764	19.4	2070	9207	1046	4653	3.4	1815	8074
500	152	0.209	311	0.764	19.4	2188	9734	1307	5814	3.6	2187	9728
600	183	0.209	311	0.764	19.4	2657	11817	1569	6979	3.6	2631	11703
700	213	0.217	324	0.780	19.8	3227	14354	1902	8461	3.5	3153	14025
800	244	0.217	324	0.780	19.8	3607	16045	2175	9675	3.5	3587	15956
900	274	0.218	324	0.780	19.8	4114	18300	2449	10894	3.5	4049	18011
1000	305	0.218	324	0.780	19.8	4494	19991	2722	12108	3.5	4483	19941
1100	335	0.218	324	0.780	19.8	5001	22246	2995	13322	3.5	4944	21992
1200	366	0.226	337	0.795	20.2	5508	24500	3392	15088	3.5	5504	24483
1300	396	0.222	330	0.811	20.6	6083	27057	3602	16022	3.5	5960	26511
1400	427	0.221	329	0.811	20.6	6463	28749	3863	17183	3.5	6389	28420
1500	457	0.221	329	0.811	20.6	6843	30440	4141	18420	3.6	6829	30377

HEAVY

* Initial tension indicates tension before 10 year creep.

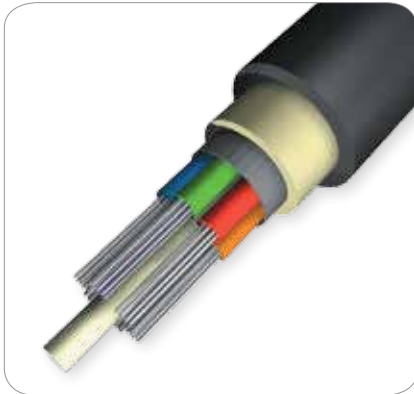
All-Dielectric Self-Supporting (AFL-ADSS®) Fiber Optic Cable

NEC HEAVY LOADING @ 1% INSTALLATION SAG

SPAN		WEIGHT		DIAMETER		MRCL		INITIAL TENSION				
FEET	METERS	LBS/FT	KG/KM	INCHES	MM	LBS	N	UNLOADED		LOADED		
								LBS	N	SAG %	LBS	N
216 FIBERS												
100	30	0.202	301	0.780	19.8	854	3797	253	1125	3.1	505	2246
200	61	0.202	301	0.780	19.8	913	4060	505	2246	3.6	875	3892
300	91	0.202	301	0.780	19.8	1314	5843	758	3372	3.6	1300	5783
400	122	0.202	301	0.780	19.8	1884	8380	1012	4502	3.6	1762	7838
500	152	0.211	313	0.795	20.2	2264	10071	1316	5854	3.6	2224	9893
600	183	0.211	314	0.795	20.2	2771	12326	1580	7028	3.6	2681	11926
700	213	0.211	314	0.795	20.2	3151	14017	1844	8203	3.6	3111	13838
800	244	0.211	314	0.795	20.2	3658	16271	2108	9377	3.6	3568	15871
900	274	0.211	314	0.795	20.2	4038	17963	2373	10556	3.6	3998	17784
1000	305	0.219	326	0.811	20.6	4545	20217	2742	12197	3.6	4538	20186
1100	335	0.220	327	0.811	20.6	5069	22548	3022	13443	3.5	5010	22286
1200	366	0.220	327	0.811	20.6	5576	24803	3300	14679	3.5	5477	24363
1300	396	0.229	340	0.827	21.0	6083	27057	3716	16530	3.5	6053	26925
1400	427	0.228	339	0.827	21.0	6590	29312	3983	17717	3.5	6515	28980
1500	457	0.228	339	0.827	21.0	6970	31003	4269	18989	3.5	6962	30969
288 FIBERS												
100	30	0.259	385	0.890	22.6	1296	5763	323	1439	2.8	619	2753
200	61	0.259	385	0.890	22.6	1296	5763	647	2878	3.3	1061	4720
300	91	0.259	385	0.890	22.6	1566	6964	971	4317	3.4	1522	6771
400	122	0.259	385	0.890	22.6	2072	9219	1295	5759	3.4	2027	9016
500	152	0.259	385	0.890	22.6	2579	11474	1619	7201	3.4	2532	11262
600	183	0.259	386	0.890	22.6	3086	13728	1943	8644	3.4	3037	13509
700	213	0.269	400	0.906	23.0	3720	16547	2351	10460	3.4	3633	16163
800	244	0.269	400	0.906	23.0	4227	18802	2688	11958	3.4	4148	18453
900	274	0.269	400	0.906	23.0	4734	21056	3025	13457	3.4	4663	20744
1000	305	0.268	399	0.921	23.4	5196	23112	3350	14900	3.4	5176	23026
1100	335	0.268	399	0.921	23.4	5703	25366	3686	16396	3.4	5692	25321
1200	366	0.268	399	0.921	23.4	6209	27621	4022	17892	3.4	6208	27616
1300	396	0.267	397	0.921	23.4	6716	29876	4339	19301	3.4	6711	29854
1400	427	0.277	412	0.937	23.8	7477	33258	4845	21552	3.4	7412	32972
1500	457	0.277	412	0.937	23.8	7984	35513	5193	23098	3.4	7938	35308
432 FIBERS												
100	30	0.298	444	0.953	24.2	1296	5763	373	1658	2.8	659	2931
200	61	0.298	444	0.953	24.2	1296	5763	745	3316	3.2	1140	5070
300	91	0.298	444	0.953	24.2	1692	7528	1118	4975	3.3	1665	7405
400	122	0.298	444	0.953	24.2	2326	10346	1492	6636	3.3	2233	9932
500	152	0.298	444	0.953	24.2	2833	12601	1865	8298	3.3	2778	12356
600	183	0.299	444	0.953	24.2	3340	14856	2239	9960	3.3	3322	14779
700	213	0.309	459	0.969	24.6	3973	17674	2701	12015	3.3	3962	17625
800	244	0.309	460	0.969	24.6	4607	20493	3088	13737	3.3	4541	20202
900	274	0.320	476	0.984	25.0	5322	23675	3597	15999	3.2	5233	23279
1000	305	0.320	476	0.984	25.0	5829	25930	3997	17781	3.2	5800	25800
1100	335	0.319	474	0.984	25.0	6463	28749	4382	19490	3.2	6379	28374
1200	366	0.319	474	0.984	25.0	6970	31003	4781	21268	3.3	6945	30891
1300	396	0.329	490	1.000	25.4	7730	34385	5350	23799	3.2	7695	34229
1400	427	0.329	490	1.000	25.4	8364	37204	5764	25639	3.2	8295	36899
1500	457	0.329	490	1.000	25.4	8997	40022	6178	27479	3.2	8896	39570

HEAVY

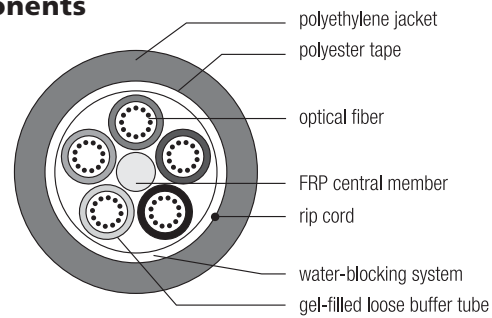
* Initial tension indicates tension before 10 year creep.



Non-Armored OSP Loose Tube (LE Series SJ)

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations. With fiber counts up to 576 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

Cable Components



Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intra-building Backbones

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Typical Lengths

MAXIMUM LENGTHS*				
FIBER COUNT	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 60	22,900	7,000	22,900	7,000
72 - 96	22,900	7,000	22,900	7,000
108 - 120	22,900	7,000	22,900	7,000
132 - 144	22,900	7,000	22,900	7,000
146 - 216	22,900	7,000	22,900	7,000
218 - 288	16,400	5,000	16,400	5,000
290 - 432	14,100	4,300	14,000	4,300
434 - 576	10,800	3,300	11,000	3,300

* Longer lengths may be available upon request.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.

Non-Armored OSP Loose Tube (LE Series SJ)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
			INCHES	MM	LBS/1,000FT	KG/KM	LBS (N)		INCHES (CM)	
							SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5101N1	6	1w/6 (4 fillers)	0.41	10.5	56	83	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE012★C5101N1	12	1w/12 (4 fillers)	0.41	10.5	56	84	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE018★C5101N1	18	1w/12,1w/6 (3 fillers)	0.41	10.5	57	85	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE024★C5101N1	24	2w/12 (3 fillers)	0.41	10.5	57	85	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE030★C5101N1	30	2w/12,1w/6 (2 fillers)	0.41	10.5	58	86	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE036★C5101N1	36	3w/12 (2 fillers)	0.41	10.5	58	86	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE048★C5101N1	48	4w/12 (1 filler)	0.41	10.5	59	87	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE060★C5101N1	60	5w/12 (no fillers)	0.41	10.5	60	89	600 (2670)	200 (890)	8.2 (21)	4.1 (11)
LE072★C6101N1	72	6w/12 (no fillers)	0.45	11.5	71	106	600 (2670)	200 (890)	9.0 (22)	4.5 (11.5)
LE084★C8101N1	84	7w/12 (1 filler)	0.52	13.3	90	135	600 (2670)	200 (890)	10.4 (27)	5.2 (14)
LE096★C8101N1	96	8w/12 (no fillers)	0.52	13.3	91	136	600 (2670)	200 (890)	10.4 (27)	5.2 (14)
LE108★CA101N1	108	9w/12 (1 filler)	0.59	15.1	117	174	600 (2670)	200 (890)	11.8 (31)	5.9 (16)
LE120★CA101N1	120	10w/12 (no fillers)	0.59	15.1	118	175	600 (2670)	200 (890)	11.8 (31)	5.9 (16)
LE132★CC101N1	132	11w/12 (1 filler)	0.67	17.0	147	219	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LE144★CC101N1	144	12w/12 (no fillers)	0.67	17.0	148	220	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LE216★CI301N1	216	18w/12 (no fillers)	0.69	17.4	150	224	600 (2670)	200 (890)	14.0 (35)	6.9 (18)
LE288★CO301N1	288	24w/12 (no fillers)	0.79	20.1	202	301	600 (2670)	200 (890)	15.8 (41)	7.9 (21)
LE432★IO301N1	432	24w/18 (no fillers)	0.87	22.0	242	360	600 (2670)	200 (890)	17.4 (44)	8.7 (22)
LE576★OO301N1	576	24w/24 (no fillers)	1.00	25.3	319	475	600 (2670)	200 (890)	20.1 (51)	10.2 (26)

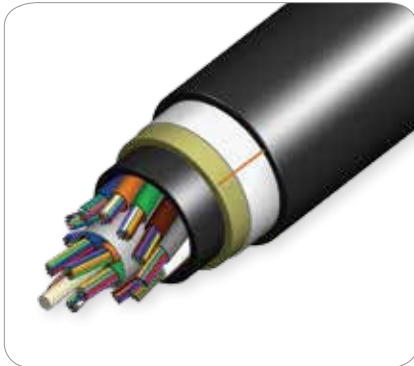
Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

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	182.8	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	320 kg	950 lbs	431 kg

AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.



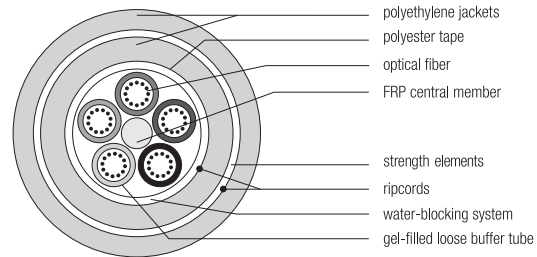
Non-Armored Loose Tube Cable— Double Jacket (LE Series DJ)

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Double Jacket Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations while incorporating a second jacket when extra mechanical protection is desired. With fiber counts up to 576 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intra-building Backbones

Cable Components



Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Typical Lengths

FIBER COUNT	MAXIMUM LENGTHS*			
	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 60	22,900	7,000	22,900	7,000
72 - 96	22,900	7,000	22,900	7,000
108 - 120	22,900	7,000	22,900	7,000
132 - 144	22,900	7,000	22,900	7,000
146 - 216	17,000	5,200	17,000	5,200
218 - 288	15,000	4,600	15,000	4,600
290 - 432	10,800	3,300	10,800	3,300
434 - 576	6,500	2,000	6,500	2,000

* Longer lengths may be available upon request.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.

Non-Armored Loose Tube Cable— Double Jacket (LE Series DJ)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
			INCHES	MM	LBS/1,000FT	KG/KM	LBS (N)		INCHES (CM)	
							SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5111N1	6	1w/6 (4 fillers)	0.49	12.5	79	118	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE012★C5111N1	12	1w/12 (4 fillers)	0.49	12.5	80	119	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE018★C5111N1	18	1w/12,1w/6 (3 fillers)	0.49	12.5	81	120	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE024★C5111N1	24	2w/12 (3 fillers)	0.49	12.5	81	120	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE030★C5111N1	30	2w/12,1w/6 (2 fillers)	0.49	12.5	82	121	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE036★C5111N1	36	3w/12 (2 fillers)	0.49	12.5	82	121	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE048★C5111N1	48	4w/12 (1 filler)	0.49	12.5	83	123	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE060★C5111N1	60	5w/12 (no fillers)	0.49	12.5	84	125	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LE072★C6111N1	72	6w/12 (no fillers)	0.53	13.4	97	144	600 (2670)	200 (890)	10.6 (27)	5.3 (14)
LE084★C8111N1	84	7w/12 (1 filler)	0.60	15.2	120	178	600 (2670)	200 (890)	12.0 (31)	6.0 (16)
LE096★C8111N1	96	8w/12 (no fillers)	0.60	15.2	121	180	600 (2670)	200 (890)	12.0 (31)	6.0 (16)
LE108★CA111N1	108	9w/12 (1 filler)	0.67	17.1	150	222	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LE120★CA111N1	120	10w/12 (no fillers)	0.67	17.1	151	224	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LE132★CC111N1	132	11w/12 (1 filler)	0.75	19.0	184	273	600 (2670)	200 (890)	15.0 (38)	7.5 (19)
LE144★CC111N1	144	12w/12 (no fillers)	0.75	19.0	185	275	600 (2670)	200 (890)	15.0 (38)	7.5 (19)
LE216★CI311N1	216	18w/12 (no fillers)	0.76	19.3	188	280	600 (2670)	200 (890)	15.2 (39)	7.6 (20)
LE288★CO311N1	288	24w/12 (no fillers)	0.87	22.0	245	365	600 (2670)	200 (890)	17.4 (44)	8.7 (22)
LE432★IO311N1	432	24w/18 (no fillers)	0.94	23.9	289	430	600 (2670)	200 (890)	18.8 (48)	9.4 (24)
LE576★OO311N1	576	24w/24 (no fillers)	1.08	27.3	372	554	600 (2670)	200 (890)	21.4 (55)	10.7 (28)

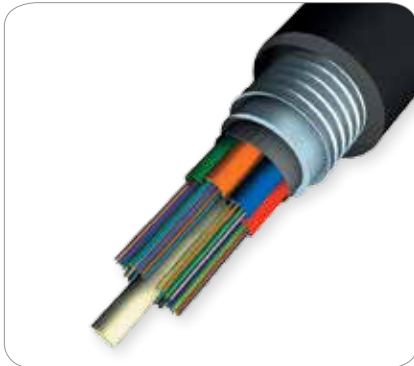
Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

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	182.8	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	320 kg	950 lbs	431 kg

AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.



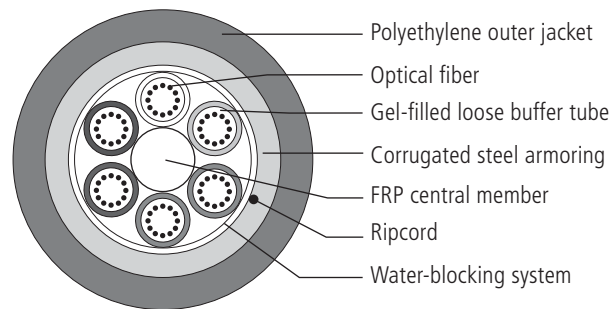
Single-Jacket Single-Armor OSP Loose Tube (LE Series SASJ)

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Loose Tube Single Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. With fiber counts up to 288 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intra-building Backbones

Cable Components



Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Typical Lengths

MAXIMUM LENGTHS*				
FIBER COUNT	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 288	19,686	6,000	19,686	6,000

* Longer lengths may be available upon request.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.

Single-Jacket Single-Armor OSP Loose Tube (LE Series SASJ)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD LBS (N)		MINIMUM BEND RADIUS INCHES (CM)	
			INCHES	MM	LBS/1,000FT	KG/KM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5201S1	6	1w/6 (4 fillers)	0.52	13.3	102	152	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE012★C5201S1	12	1w/12 (4 fillers)	0.52	13.3	102	152	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE018★C5201S1	18	1w/12,1w/6 (3 fillers)	0.52	13.3	103	153	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE024★C5201S1	24	2w/12 (3 fillers)	0.52	13.3	103	154	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE030★C5201S1	30	2w/12,1w/6 (2 fillers)	0.52	13.3	104	155	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE036★C5201S1	36	3w/12 (2 fillers)	0.52	13.3	104	155	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE048★C5201S1	48	4w/12 (1 filler)	0.52	13.3	105	157	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE060★C5201S1	60	5w/12 (no fillers)	0.52	13.3	106	158	600 (2670)	200 (890)	10.7 (28)	5.4 (14)
LE072★C6201S1	72	6w/12 (no fillers)	0.56	14.2	120	179	600 (2670)	200 (890)	11.4 (29)	5.7 (15)
LE084★C8201S1	84	7w/12 (1 filler)	0.63	16.0	146	218	600 (2670)	200 (890)	12.8 (33)	6.4 (16.3)
LE096★C8201S1	96	8w/12 (no fillers)	0.63	16.0	147	219	600 (2670)	200 (890)	12.8 (33)	6.4 (16.3)
LE108★CA201S1	108	9w/12 (1 filler)	0.70	17.8	176	262	600 (2670)	200 (890)	14.2 (37)	7.1 (18)
LE120★CA201S1	120	10w/12 (no fillers)	0.70	17.8	177	264	600 (2670)	200 (890)	14.2 (37)	7.1 (18)
LE132★CC201S1	132	11w/12 (1 filler)	0.78	19.7	213	317	600 (2670)	200 (890)	15.7 (40)	7.9 (20)
LE144★CC201S1	144	12w/12 (no fillers)	0.78	19.7	214	319	600 (2670)	200 (890)	15.7 (40)	7.9 (20)
LE192★O8201S1	192	8 w/24 (no fillers)	0.63	16.0	152	226	600 (2670)	200 (890)	12.8 (33)	6.4 (16.3)
LE288★OC201S1	288	12 w/24 (no fillers)	0.78	19.7	219	326	600 (2670)	200 (890)	15.7 (40)	7.9 (20)

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

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	182.8	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	320 kg	950 lbs	431 kg

AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.



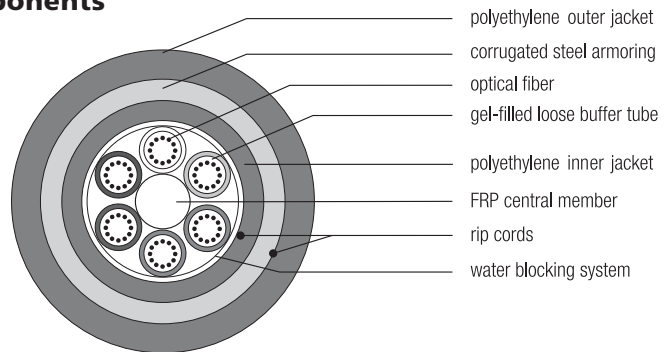
Double-Jacket Single-Armor OSP Loose Tube (LE Series SADJ)

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Loose Tube Double Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. With fiber counts up to 312 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intra-building Backbones

Cable Components



Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Typical Lengths

FIBER COUNT	MAXIMUM LENGTHS*			
	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 72	20,000	6,000	20,000	6,000
84 - 96	14,700	4,500	14,700	4,500
108 - 120	13,000	4,000	13,000	4,000
132 - 144	11,100	3,400	11,100	3,400
146 - 312	10,000	3,000	10,000	3,000

* Longer lengths may be available upon request.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.

Double-Jacket Single-Armor OSP Loose Tube (LE Series SADJ)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
			INCHES	MM	LBS/1,000FT	KG/KM	LBS (N)		INCHES (CM)	
							SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5111S1	6	1w/6 (4 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE012★C5111S1	12	1w/12 (4 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE018★C5111S1	18	1w/12,1w/6 (3 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE024★C5111S1	24	2w/12 (3 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE030★C5111S1	30	2w/12,1w/6 (2 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE036★C5111S1	36	3w/12 (2 fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE048★C5111S1	48	4w/12 (1 filler)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE060★C5111S1	60	5w/12 (no fillers)	0.59	15.0	128	190	600 (2670)	180 (800)	12.4 (32.0)	5.9 (15.0)
LE072★C6111S1	72	6w/12 (no fillers)	0.62	15.9	143	212	600 (2670)	180 (800)	13.0 (33.0)	6.5 (16.4)
LE084★C8111S1	84	7w/12 (1 filler)	0.69	17.6	169	252	600 (2670)	180 (800)	14.4 (36.4)	7.2 (18.2)
LE096★C8111S1	96	8w/12 (no fillers)	0.69	17.6	169	252	600 (2670)	180 (800)	14.4 (36.4)	7.2 (18.2)
LE108★CA111S1	108	9w/12 (1 filler)	0.76	19.3	201	299	600 (2670)	180 (800)	15.8 (40.2)	7.9 (20.1)
LE120★CA111S1	120	10w/12 (no fillers)	0.76	19.3	201	299	600 (2670)	180 (800)	15.8 (40.2)	7.9 (20.1)
LE132★CC111S1	132	11w/12 (1 filler)	0.83	21.2	234	348	600 (2670)	180 (800)	18.0 (46.0)	9.0 (22.9)
LE144★CC111S1	144	12w/12 (no fillers)	0.83	21.2	234	348	600 (2670)	180 (800)	18.0 (46.0)	9.0 (22.9)

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.



All-Dielectric Armored Rodent-Resistant OSP Loose Tube (LN Series)

AFL's All-dielectric Rodent-Resistant cable is designed specifically for environments that have an increased risk of rodent infestation and disturbance. The LN-series product line covers the range of fiber-counts of up to 576 fibers. The ultra-hard, non-metallic outer polymer shell reduces risk of transmission interruptions in vital OSP network interconnections. In addition, the cable line meets all applicable RUS, GR-20 and IEC and TIA related design and performance guidelines.

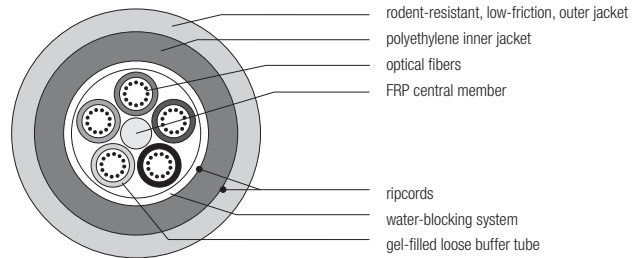
Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Steam-tunnel Substreet Drainage Networks
- Local Loop
- Airport (FAA-E-2761c, Type B)

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Cable Components



Typical Lengths

FIBER COUNT	MAXIMUM LENGTHS*			
	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 60	22,900	7,000	22,900	8,000
72 - 96	22,900	7,000	22,900	7,000
108 - 120	22,900	7,000	22,900	7,000
132 - 144	22,600	6,900	22,600	6,900
146 - 216	17,000	5,200	17,000	5,200
218 - 288	15,000	4,600	15,000	4,600
290 - 432	10,800	3,300	10,800	3,300
434 - 576	6,500	2,000	6,500	2,000

* Longer lengths may be available upon request.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.

All-Dielectric Armored Rodent-Resistant OSP Loose Tube (LN Series)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
			INCHES	MM	LBS/1,000FT	KG/KM	LBS (N)		INCHES (CM)	
							SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LN006★C5101N1	6	1w/6 (4 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN012★C5101N1	12	1w/12 (4 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN018★C5101N1	18	1w/12,1w/6 (3 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN024★C5101N1	24	2w/12 (3 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN030★C5101N1	30	2w/12,1w/6 (2 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN036★C5101N1	36	3w/12 (2 fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN048★C5101N1	48	4w/12 (1 filler)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN060★C5101N1	60	5w/12 (no fillers)	0.49	12.5	56	84	600 (2670)	200 (890)	9.8 (25)	4.9 (13)
LN072★C6101N1	72	6w/12 (no fillers)	0.53	13.4	65	97	600 (2670)	200 (890)	10.6 (27)	5.3 (14)
LN084★C8101N1	84	7w/12 (1 filler)	0.60	15.2	81	121	600 (2670)	200 (890)	12.0 (31)	6.0 (16)
LN096★C8101N1	96	8w/12 (no fillers)	0.60	15.2	81	121	600 (2670)	200 (890)	12.0 (31)	6.0 (16)
LN108★CA101N1	108	9w/12 (1 filler)	0.67	17.1	101	151	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LN120★CA101N1	120	10w/12 (no fillers)	0.67	17.1	101	151	600 (2670)	200 (890)	13.4 (34)	6.7 (17)
LN132★CC101N1	132	11w/12 (1 filler)	0.75	19.0	123	184	600 (2670)	200 (890)	15.0 (38)	7.5 (19)
LN144★CC101N1	144	12w/12 (no fillers)	0.75	19.0	123	184	600 (2670)	200 (890)	15.0 (38)	7.5 (19)
LN216★CI301N1	216	18w/12 (no fillers)	0.76	19.3	125	187	600 (2670)	200 (890)	15.2 (39)	7.6 (20)
LN288★CO301N1	288	24w/12 (no fillers)	0.87	22.0	156	234	600 (2670)	200 (890)	17.4 (44)	8.7 (22)
LN432★IO301N1	432	24w/18 (no fillers)	0.94	23.9	183	273	600 (2670)	200 (890)	18.8 (48)	9.4 (24)
LN576★OO301N1	576	24w/24 (no fillers)	1.07	27.3	243	303	600 (2670)	200 (890)	21.4 (55)	10.7 (28)

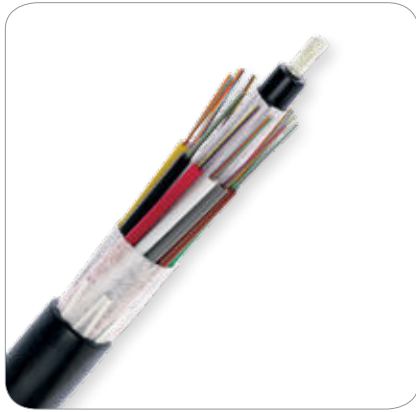
Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

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	182.8	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	320 kg	950 lbs	431 kg

AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.



Non-Armored Single Jacket Dry Loose Tube Cable

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Dry Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations. Our dry buffer tube cables feature fiber counts up to 288, compliance with EIA/TIA and REA/RUS PE-90, and are S-Z stranded for easy mid-span access. The dry buffer tube and core permit rapid cable preparation and termination. Water blocking materials are easily removed. Industry standard designs combined with innovative technologies, such as a dry core and dry tube product, yield a world class cable that will support today's and tomorrow's technological needs.

Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

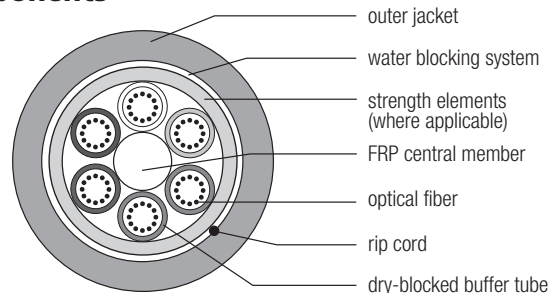
Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +60°C

Cable Components



Typical Lengths

MAXIMUM LENGTHS*				
FIBER COUNT	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 60	39,370	12,000	26,200	8,000
72 - 96	32,800	10,000	26,200	8,000
108 - 120	31,100	9,500	26,200	8,000
132 - 144	22,900	7,000	22,900	7,000
146 - 288	22,900	7,000	—	—

* Longer lengths may be available upon request.

Optical Information

FIBER TYPE	MAXIMUM ATTENUATION (dB/km)				OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		GIGABIT ETHERNET MIN. LINK DISTANCE (METERS)	
	850nm	1300nm	1310nm	1550nm	850nm	1300nm	850nm	1300nm
(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) 50/125 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.

Non-Armored Single Jacket Dry Loose Tube Cable

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER	NOMINAL WEIGHT	MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
					LBS. (N)		INCHES (CM)	
			INCHES (MM)	LBS/1,000FT (KG/KM)	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5101N1D	6	1w/6 (4 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE012★C5101N1D	12	1w/12 (4 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE018★C5101N1D	18	1w/12, 1w/6 (3 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE024★C5101N1D	24	2w/12 (3 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE030★C5101N1D	30	2w/12, 1w/6 (2 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE036★C5101N1D	36	3w/12 (2 fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE048★C5101N1D	48	4w/12 (1 filler)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE060★C5101N1D	60	5w/12 (No fillers)	0.45 (11.4)	53.8 (80.2)	600 (2700)	200 (890)	9.0 (22.8)	4.5 (11.4)
LE072★C6101N1D	72	6w/12 (No fillers)	0.49 (12.4)	62.6 (93.4)	600 (2700)	200 (890)	9.8 (24.8)	4.9 (12.4)
LE084★C8101N1D	84	7w/12 (1 filler)	0.56 (14.2)	80.9 (120.7)	600 (2700)	200 (890)	11.2 (28.4)	5.6 (14.2)
LE096★C8101N1D	96	8w/12 (No fillers)	0.56 (14.2)	80.9 (120.7)	600 (2700)	200 (890)	11.2 (28.4)	5.6 (14.2)
LE108★CA101N1D	108	9w/12 (1 filler)	0.63 (15.9)	101.5 (151.4)	600 (2700)	200 (890)	12.6 (31.8)	6.3 (15.9)
LE120★CA101N1D	120	10w/12 (No fillers)	0.63 (15.9)	101.5 (151.4)	600 (2700)	200 (890)	12.6 (31.8)	6.3 (15.9)
LE132★CC101N1D	132	11w/12 (1 filler)	0.70 (17.8)	127.5 (190.1)	600 (2700)	200 (890)	14.0 (35.6)	7.0 (17.8)
LE144★CC101N1D	144	12w/12 (No fillers)	0.70 (17.8)	127.5 (190.1)	600 (2700)	200 (890)	14.0 (35.6)	7.0 (17.8)
LE216★C1301N1D	216	18w/12 (No fillers)	0.71 (18.0)	116.1 (173.1)	600 (2700)	200 (890)	14.2 (36.0)	7.1 (18.0)

Note: Diameter and weight subject to change without notice

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

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



Armored Single Jacket/Single Armor Dry Loose Tube Cable

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Dry Loose Tube Single Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. Our dry buffer tube cables feature fiber counts up to 144, compliance with EIA/TIA and REA/RUS PE-90, and are S-Z stranded for easy mid-span access. The dry buffer tube and core permit rapid cable preparation and termination. Water blocking materials are easily removed. Industry standard designs combined with innovative technologies, such as a dry core and dry tube product, yield a world class cable that will support today's and tomorrow's technological needs.

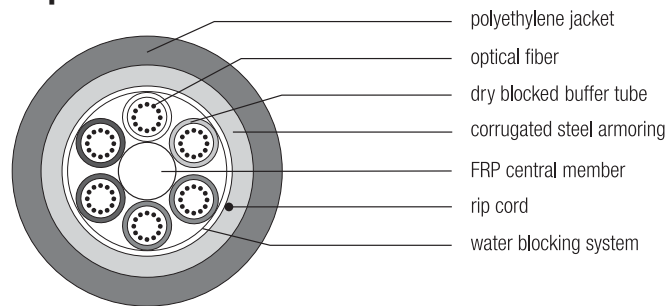
Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

Temperature Range

Operating: -40°C to + 70°C
 Storage : -40°C to + 75°C
 Installation: -30°C to + 60°C

Cable Components



Typical Lengths

MAXIMUM LENGTHS*				
FIBER COUNT	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 60	39,370	12,000	26,200	8,000
72 - 96	32,800	10,000	26,200	8,000
108 - 120	31,100	9,500	26,200	8,000
132 - 144	22,900	7,000	22,900	7,000

* Longer lengths may be available upon request.

Optical Information

FIBER TYPE	MAXIMUM ATTENUATION (dB/km)				OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km)		GIGABIT ETHERNET MIN. LINK DISTANCE (METERS)	
	850nm	1300nm	1310nm	1550nm	850nm	1300nm	850nm	1300nm
(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) 50/125 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.

Armored Single Jacket/Single Armor Dry Loose Tube Cable

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER INCHES (MM)	NOMINAL WEIGHT LBS/1,000FT (KG/KM)	MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
					LBS. (N)		INCHES (CM)	
					SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LE006★C5201S1D	6	1w/6 (4 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE012★C5201S1D	12	1w/12 (4 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE018★C5201S1D	18	1w/12, 1w/6 (3 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE024★C5201S1D	24	2w/12 (3 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE030★C5201S1D	30	2w/12, 1w/6 (2 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE036★C5201S1D	36	3w/12 (2 fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE048★C5201S1D	48	4w/12 (1 filler)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE060★C5201S1D	60	5w/12 (No fillers)	0.52 (13.2)	94 (140)	600 (2700)	180 (800)	10.4 (26.4)	5.2 (13.2)
LE072★C6201S1D	72	6w/12 (No fillers)	0.55 (14.0)	108 (161)	600 (2700)	180 (800)	11.0 (28.0)	5.5 (14.0)
LE084★C8201S1D	84	7w/12 (1 filler)	0.62 (15.8)	130 (193)	600 (2700)	180 (800)	12.4 (31.6)	6.2 (15.8)
LE096★C8201S1D	96	8w/12 (No fillers)	0.62 (15.8)	130 (193)	600 (2700)	180 (800)	12.4 (31.6)	6.2 (15.8)
LE108★CA201S1D	108	9w/12 (1 filler)	0.70 (17.7)	159 (237)	600 (2700)	180 (800)	14.0 (35.4)	7.0 (17.7)
LE120★CA201S1D	120	10w/12 (No fillers)	0.70 (17.7)	159 (237)	600 (2700)	180 (800)	14.0 (35.4)	7.0 (17.7)
LE132★CC201S1D	132	11w/12 (1 filler)	0.77 (19.6)	192 (285)	600 (2700)	180 (800)	15.4 (39.2)	7.7 (19.6)
LE144★CC201S1D	144	12w/12 (No fillers)	0.77 (19.6)	192 (285)	600 (2700)	180 (800)	15.4 (39.2)	7.7 (19.6)

Note: Diameter and weight subject to change without notice

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

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



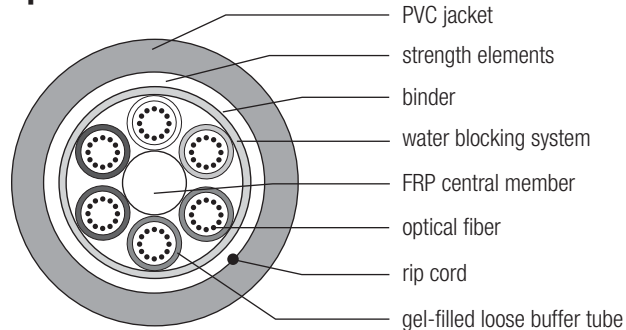
Riser Single-Jacket I/O Loose Tube (LV Series SJ)

Indoor/outdoor stranded loose tube combines the robust mechanical and environmental characteristics of an outside plant cable with the flexibility of an inside plant riser cable. By installing indoor/outdoor stranded loose tube, costly splice locations entering into a building are avoided, being routed directly from the outside plant to telecommunications closets, or main distribution frames (MDF) through the riser of a building and eliminating the "50-foot rule." Indoor/Outdoor Stranded Design loose tube cable is moisture and U.V. resistant, S-Z stranded for easy mid-span access, listed for OFNR use per UL standards, and can be used in both duct and lashed applications.

Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intra-building Backbones
- MSHA Approved for Mining Applications

Cable Components



Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-30°C to +70°C
OPERATING	-40°C to +70°C
STORAGE	-40°C to +75°C

Typical Lengths

MAXIMUM LENGTHS*				
FIBER COUNT	SINGLE-MODE		MULTIMODE	
	FEET	METERS	FEET	METERS
6 - 144	22,900	7,000	22,900	7,000

* Longer lengths may be available.

Fiber Specifications

FIBER TYPE	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. 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
(5) 50/125 GIGA-Link™ 600	2.9	0.9	N/A	N/A	500	500	600	600
(L) 50/125 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) AFL G.657.A1 Single-mode	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.



Riser Single-Jacket I/O Loose Tube (LV Series SJ)

Ordering Information

AFL NO.	FIBER COUNT	NUMBER OF TUBES/FIBERS	NOMINAL DIAMETER	NOMINAL WEIGHT	MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
			INCHES (MM)	LBS/1,000 FT (KG/KM)	LBS. (N)		INCHES (CM)	
					SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
LV006★C5101N1	6	1w/6 (4 fillers)	0.51 (12.9)	107 (159)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV012★C5101N1	12	1w/12 (4 fillers)	0.51 (12.9)	108 (160)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV018★C5101N1	18	1w/12, 1w/6 (3 fillers)	0.51 (12.9)	108 (161)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV024★C5101N1	24	2w/12 (3 fillers)	0.51 (12.9)	108 (161)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV030★C5101N1	30	2w/12, 1w/6 (2 fillers)	0.51 (12.9)	109 (162)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV036★C5101N1	36	3w/12 (2 fillers)	0.51 (12.9)	109 (162)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV048★C5101N1	48	4w/12 (1 filler)	0.51 (12.9)	110 (164)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV060★C5101N1	60	5w/12 (No fillers)	0.51 (12.9)	111 (165)	600 (2700)	200 (890)	10.2 (26)	5.1 (13)
LV072★C6101N1	72	6w/12 (No fillers)	0.54 (13.7)	128 (190)	600 (2700)	200 (890)	10.8 (28)	5.4 (14)
LV084★C8101N1	84	7w/12 (1 filler)	0.61 (15.5)	158 (236)	600 (2700)	200 (890)	12.2 (31)	6.1 (16)
LV096★C8101N1	96	8w/12 (No fillers)	0.61 (15.5)	159 (237)	600 (2700)	200 (890)	12.2 (31)	6.1 (16)
LV108★CA101N1	108	9w/12 (1 filler)	0.69 (17.4)	197 (294)	600 (2700)	200 (890)	14.0 (35)	7.0 (18)
LV120★CA101N1	120	10w/12 (No fillers)	0.69 (17.4)	198 (295)	600 (2700)	200 (890)	14.0 (35)	7.0 (18)
LV132★CC101N1	132	11w/12 (1 filler)	0.76 (19.3)	242 (360)	600 (2700)	200 (890)	15.2 (39)	7.6 (20)
LV144★CC101N1	144	12w/12 (No fillers)	0.76 (19.3)	243 (361)	600 (2700)	200 (890)	15.2 (39)	7.6 (20)

Note: Diameter and weight subject to change without notice

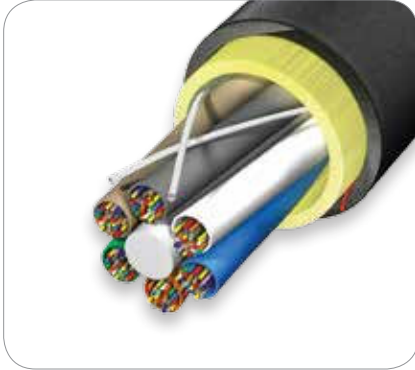
★ Fiber Types – Replace asterisk (★) in AFL number with number in the Fiber Specifications table on previous page.

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	182.8	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	320 kg	950 lbs	431 kg

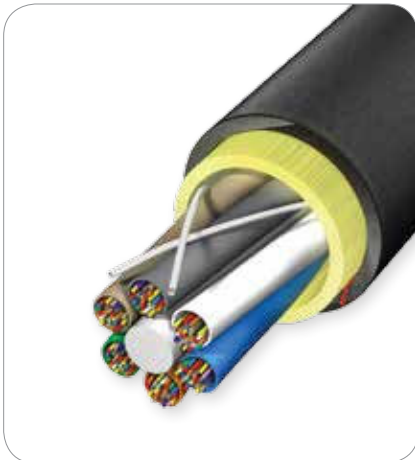
AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.

Specialized Loose Tube Cables



Low Smoke Zero Halogen Loose Tube Cable with Thermoset Jacket

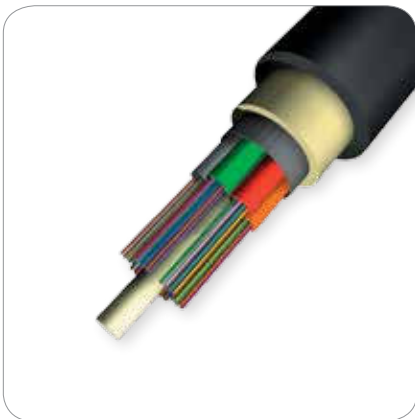
Consisting of thermoset (XLPO) jacket, AFL's LX-series of low-smoke zero-halogen (LSZH) loose tube cables are specifically designed for harsh environments. Ideal for indoor and outdoor industrial applications, the cable design includes dry-core water blocking system, SZ-stranded core for easy mid-span access to fibers, and a highly chemical resistant, cross-linked UV-resistant outer jacket. For even greater mechanical robustness, a corrugated steel armor version is available. Applications include mining, industrial, railways, subways, and much more.



Low Smoke Zero Halogen OFN-LS Listed Loose Tube Cable

AFL's Low Smoke Zero Halogen (LSZH) Loose Tube cable is designed for use in outdoor aerial and indoor duct applications including subways and tunnels with requirements for limited smoke and zero halogen. Optical fibers are located within S-Z standard buffer tubes, providing stable and reliable long-term performance. The cable is dry-blocked (no messy gel flooding the core) to prevent axial flow of moisture and utilizes a flame-retardant, non-halogenated UV-resistant outer jacket.

AFL's Low Smoke Zero Halogen (LSZH) loose tube cable group includes OFN-LS Listed as well as non-listed designs. The OFN-LS listed loose tube cable line (LL-Series) is specially engineered for applications that require UL/NEC compliant cables intended for inside-building applications and must meet minimum flame and smoke generation guideline. The Non-Listed cables are also constructed with LSZH materials and are intended for OSP installations where NFPA/NEC listing is not required.

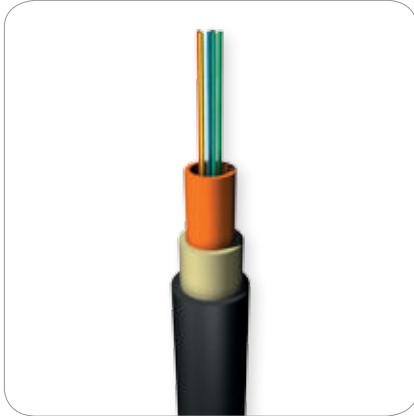


LA-Series Low Temp Harsh Environment LSZH Loose Tube Fiber Optic Cable

The LA-Series is specially designed for applications that demand reliable performance in harsh environment installations. The cable construction incorporates a variety of packaging technologies that allow the product to operate in extremely low temperatures, mechanically abusive installations and highly caustic and acidic environments. The key to the reliable, ultra-high performance is the specially designed cable core and the dual layer jacketing system.

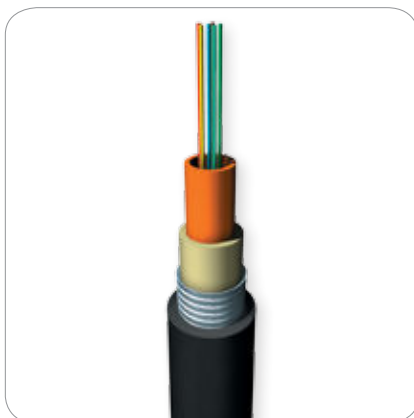
The cable core is constructed using materials and engineered geometry that optimizes the isolation of the optical fibers from the stresses and strains imparted on the cable and commonly realized in extreme environments. The outer jacketing is designed to further protect the ruggedized core assembly with a multiplying system made up of a double-ply, low smoke zero halogen (LSZH) flame resistant jacketing system that integrates a strong layer of aramid yarn between the inner and outer sheaths.

Specialized Loose Tube Cables (cont.)



Uniflex® Non-Armored Loose Tube Cable

AFL's non-armored Uniflex® is a central loose tube cable used for duct and low fiber drop applications.



Uniflex® Armored Loose Tube Cable

AFL's Armored Uniflex cable is a central loose tube product used in various outside plant applications. Its compact design holds up to 12 fibers. The corrugated steel armor provides additional mechanical protection and also serves as toneable element within the cable.



Outside Plant (OSP) MicroCore® Blown Fiber Optic Cable

AFL OSP MicroCore cable series is designed for outside plant installation in microduct conduit systems. The unique, high-fiber density geometry yields a cable construction that can safely accommodate up to 144-fiber within cable package that can be air-blown into a microduct with an inside diameter as small as 10 mm or (0.394"). This cable solution offers the system designer the flexibility to install from 12- to 144-fibers within each 10 mm ID microduct within the multi-duct system.

For example, with a 7-way 12.7 mm x 10 mm (conduit with seven microducts) in place, the system designer has the flexibility to install from 12 to 144 fibers per microduct. With this approach, only the number of fibers required for initial networking requirements need to be installed. Then as future network upgrades and expansions are required, the spare microducts can be jetted with addition OSP MicroCore cables without having to add additional pathway space.

Reel and Packaging Information

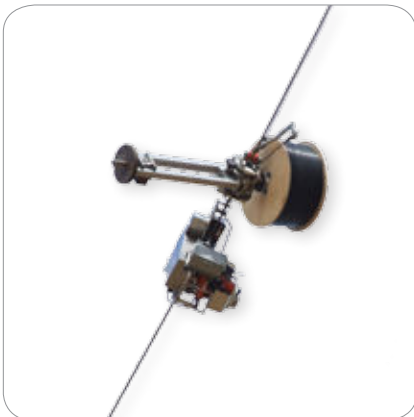
REEL TYPE	FL	TR	DR	OW	TARE	FL	TR	DR	OW	TARE
	(CM)				(KGS)	(IN)				(LBS)
Wood	147	81	71	97	196	58	32	28	38	434
Wood	168	91	91	107	260	66	36	36	42	574
Wood	183	91	91	107	300	72	36	36	42	661
Wood	213	86	89	104	384	84	34	35	41	847
Steel	152	81	81	97	156	60	32	32	38	345
Steel	183	91	102	107	245	72	36	40	42	540
Steel	213	114	107	130	350	84	45	42	51	773

- **FL** - Flange Diameter; **TR** - Inside Traverse Width; **DR** - Drum Diameter; **OW** - Outside Overall Width
- Arbor Hole Diameter: Wood: 3-1/8 in (7.9 cm)
Steel: 3 in (7.6 cm)
- Ordered lengths should include a distribution of lengths, i.e., all reels cannot be ordered at the maximum. A typical reel length distribution is as follows:
 - 6000 m – 7000 m ~ 15% of reels
 - 4500 m – 6000 m ~ 55% of reels
 - 2500 m – 4500 m ~ 25% of reels
 - < 2500 m ~ 5% of reels
- Wood reels with flex-wrap covering are standard. Non-returnable steel reels and/or wood lagging are available upon request. Additional reel sizes may be available upon request.
- Steel reels are recommended for long term storage (>4 months). Reference AFL's "Fiber Optic Cable Receiving, Handling and Storage" document for additional information.



Temperature Range

Operating: -40°C to +85°C
 Store: -40°C to +50°C
 Installation: -20°C to +50°C



SkyWrap®

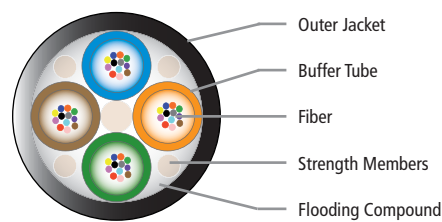
Successfully installed worldwide since 1982, SkyWrap is a fiber optic cable helically applied on ground wires or phase conductors. A specially designed spinning machine is used to wrap the cable under controlled conditions. This system offers a complete communication link designed and engineered for high-voltage environments at low cost.

SkyWrap is the ideal solution when access to the overhead line is problematic due to environment or terrain. The installation equipment is lightweight, easy to handle and quick to install. When power outages are hard to coordinate SkyWrap can be installed on ground wire while the phase conductors remain live, or on phase conductors with single circuit outage.

Benefits

- Quick, cost effective installation
- Utilize existing power line infrastructure
- Use where access is limited (e.g. mountains and river crossings)
- Use for both ground wires and phase conductors
- Live line installations on ground wire or single circuit outage on phase
- Complete lifetime turn-key solutions
- Over 30 years installation experience

Cable Components

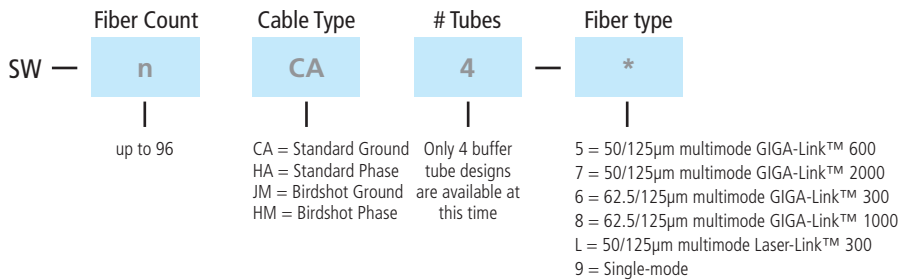


Cable Features

- Designed for ground wires or phase conductors
- Zero fiber strain under all service conditions
- Up to 96 fibers per cable with 4 gel-filled tubes
- Double SkyWrap installations provides 192 fiber capacity
- SkyWrap can be installed on OPGW to increase existing fiber count
- Shotgun (birdshot) resistant jacket designs for tougher environments
- Small size and low weight ensures minimum loads on overhead lines
- All-dielectric construction provides immunity from electromagnetic interference
- Complies with IEEE 1594-2008 specification

SkyWrap®

Part Number



SkyWrap Ordering Information - Technical Figures as of 11 June 2014

ITEM NUMBER	FIBER COUNT	CABLE O.D. INCHES (mm)	WEIGHT LBS/MILE (kg/km)	LENGTH PER REEL FEET (m)	CASSETTE LENGTH FEET (m)
STANDARD GROUND WIRE					
SW-nCA4-★	04 - 24	0.252 (6.4)	128 (36)	8,005 (2,440)	16,010 (4,880)
SW-nCA4-★	26 - 48	0.260 (6.6)	138 (39)	7,530 (2,295)	15,059 (4,590)
SW-nCA4-★	50 - 96	0.315 (8.0)	209 (59)	5,125 (1,562)	10,249 (3,124)
BIRDSHOT RESISTANT GROUND WIRE					
SW-nJM4-★	04 - 24	0.287 (7.3)	163 (46)	5,991 (1,826)	11,982 (3,652)
SW-nJM4-★	26 - 48	0.295 (7.5)	177 (50)	5,676 (1,730)	11,352 (3,460)
SW-nJM4-★	50 - 96	0.350 (8.9)	252 (71)	4,029 (1,228)	8,058 (2,456)
STANDARD PHASE CONDUCTOR					
SW-nHA4-★	04 - 24	0.287 (7.3)	195 (55)	6,280 (1,914)	12,559 (3,828)
SW-nHA4-★	26 - 48	0.295 (7.5)	209 (59)	5,948 (1,813)	11,896 (3,626)
SW-nHA4-★	50 - 96	0.350 (8.9)	291 (82)	4,226 (1,288)	8,451 (2,576)
BIRDSHOT RESISTANT PHASE CONDUCTOR					
SW-nHM4-★	04 - 24	0.315 (8.0)	216 (61)	5,230 (1,594)	10,459 (3,188)
SW-nHM4-★	26 - 48	0.323 (8.2)	231 (65)	4,977 (1,517)	9,954 (3,034)
SW-nHM4-★	50 - 96	0.378 (9.6)	316 (89)	3,632 (1,107)	7,264 (2,214)

Note: Diameter and weight subject to change without notice

Installation equipment information

PARAMETER	VALUE
Typical Weight (includes cable and balance weight)	550 lbs (250kg)
Min-Max Radius of rotation	2.85-4.76 ft (0.87-1.45m)
Wrapping Speed	3 miles per hour (5km per hour)

Installation Hardware

A full range of hardware and accessories are available as part of the SkyWrap solution. Many different options are available to suit individual structure types and environmental conditions. Please contact AFL for more information.



AccessWrap™

AccessWrap provides a quick, cost effective and sustainable solution to taking fibre optic connections the 'last mile' on distribution power lines.

Based on proven SkyWrap® technology, cable is wrapped around the existing overhead powerline infrastructure with minimal disruption to service and no modification requirements to structures. The cable is designed to withstand the aggressive environments of aerial applications in any climate.

AFL provides a complete solution from line surveys, installation planning to supply of cable, installation equipment and project management. AFL can also offer after sales service support packages to suit specific requirements.



Benefits:

- Utilise existing power line infrastructure to minimise capital investment
- Alleviate problems of land access and areas of difficult terrain
- Significantly reduce cost of excavation and trenching
- Extend fibre networks to remote LTE equipment in the roll out of mobile 4G
- Connectivity where terrain and line of sight issues make wireless less reliable
- Extend customer reach for FTTx applications particularly in rural and remote areas
- Integration as part of Smart Metering technology
- Reduce capital costs for subscriber based fibre networks

Features:

- Proven technology, SkyWrap installations has been in service for over 25 years
- Quick, cost effective installation
- Use where access is limited (e.g. easements and rights of way)
- Minimal environmental impact
- Installation equipment weight and size is specially designed for installation on overhead lines in the 6 kV to 50 kV range
- Fibre counts up to 24, any type of single mode or multimode fibre
- The AccessWrap System includes fibre optic cable, hardware and installation equipment

Ordering Information:

Please contact your local AFL Representative or sales@AFL-europe.com to discuss your requirement for AccessWrap

Please Contact your AFL Sales Rep for information about any of our other products or services.

TEST AND INSPECTION



FOCIS WiFi



SMLP5-5 Optical Loss Test Kit



OPGW Suspension, SB01 Splice Enclosure, Bolted Dead End

FIBER INSIDE PLANT



FUSEConnect® Connectors



XFM®-HD 4RU

Along with a broad range of products, we offer professional training through the Light Brigade®. Over 55,000 people worldwide have completed Light Brigade training. Our instructor-led classes provide critical knowledge and skills for technicians, engineers and others. Check out our standard and specialty courses at www.lightbrigade.com



1-800-235-3423 | 1-864-433-0333 | www.AFLglobal.com

