

Federal Aviation Administration (FAA) OSP Loose Tube (LG Series)

The AFL family of FAA-compliant fiber optic loose tube cables is specifically designed for airport and related installations that must comply with meet U.S. Department of Transportation Federal Aviation Administration (FAA) requirements. AFL FAA-compliant loose tube cables incorporate a highly chemical resistant Polyamide jacketing system that is ideally suited for use in pathways exposed to hydrocarbon liquids, de-icing fluids, cleaning solvents, jet fuels and other outside-plant networking applications that are typical at these facilities. AFL FAA-compliant cables are available with a variety of fiber-types including; Single-mode, multimode, bend-insensitive and hybrid (SM and MM) optical fibers.

Applications

- Runway communication, lighting and control
- Controltower - remote location networking
- Inter-terminal network connections
- Pathways exposed to corrosive solutions
- Direct burial in suitable trenched pathways

Standards

- FAA-E-2761, Type B
- GR-20-CORE
- TIA/EIA-568-B

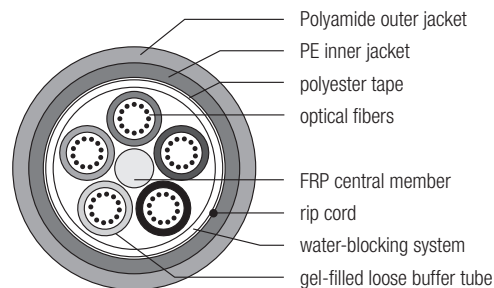
Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -10°C to +70°C

Cable Components



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

* 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)	
	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) 50/125 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 Futuriguide 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.

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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
LG006★C5111N1	6	1w/6 (4 fillers)	0.46	11.8	92	137	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG012★C5111N1	12	1w/12 (4 fillers)	0.46	11.8	92	137	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG018★C5111N1	18	1w/12,1w/6 (3 fillers)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG024★C5111N1	24	2w/12 (3 fillers)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG030★C5111N1	30	2w/12,1w/6 (2 fillers)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG036★C5111N1	36	3w/12 (2 fillers)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG048★C5111N1	48	4w/12 (1 filler)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG060★C5111N1	60	5w/12 (no fillers)	0.46	11.8	96	143	600 (2670)	200 (890)	9.2 (23.6)	4.6 (11.8)
LG072★C6111N1	72	6w/12 (no fillers)	0.50	12.8	110	163	600 (2670)	200 (890)	10.0 (25.6)	5.0 (12.8)
LG084★C8111N1	84	7w/12 (1 filler)	0.57	14.6	129	191	600 (2670)	200 (890)	11.4 (29.2)	5.7 (14.6)
LG096★C8111N1	96	8w/12 (no fillers)	0.57	14.6	129	191	600 (2670)	200 (890)	11.4 (29.2)	5.7 (14.6)
LG108★CA111N1	108	9w/12 (1 filler)	0.64	16.3	149	221	600 (2670)	200 (890)	12.8 (32.6)	6.4 (16.3)
LG120★CA111N1	120	10w/12 (no fillers)	0.64	16.3	149	221	600 (2670)	200 (890)	12.8 (32.6)	6.4 (16.3)
LG132★CC111N1	132	11w/12 (1 filler)	0.72	18.3	204	303	600 (2670)	200 (890)	14.4 (36.6)	7.2 (18.3)
LG144★CC111N1	144	12w/12 (no fillers)	0.72	18.3	204	303	600 (2670)	200 (890)	14.4 (36.6)	7.2 (18.3)

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

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.