

Listed Gel-Free, LSZH, Loose Tube Cable (LL Series)

AFL LL-Series Gel-Free fiber optic cables are designed for use in traditional network communication infrastructures deployed in environments requiring the performance of outside plant cabling, while offering the safety of a listed low smoke zero halogen solution. Applications in confined spaces such as tunnels and mine shafts require low smoke zero halogen materials to enhance life safety and minimize damage to sensitive electronic equipment in the event of a fire. Additionally, AFL's product line incorporates the latest dry water-absorption technology within the fiber-containing buffer tubes which results in user-friendly handling of fibers during routing and termination.

Temperature Range

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

Crush Resistance

Armored: 440 N/cm (250 lbs/in)
 Non-armored: 220 N/cm (125 lbs/in)



Rodent-deterrent Jacket Option Available

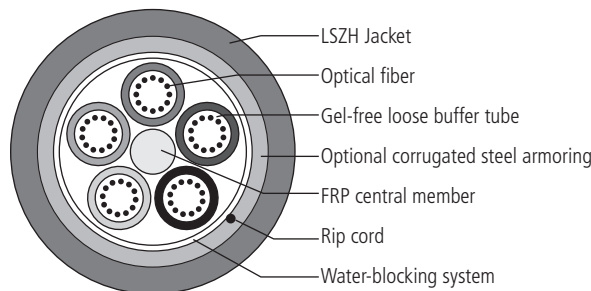
Features

- OFN(C)G-LS allows for use in OSP and inside plant pathways
- Gel-free buffer tubes reduce fiber prep termination time
- SZ-stranded cable core for easy mid-span access of fibers
- UV-stabilized outer jacket for long-term performance in outdoor applications
- 6 to 288 fibers allow for specific cable choices for multiple applications

Specifications

- OFNG-LS Listed, CSA-FT4, IEEE1202 and UL1685
- Meets requirements of NFPA 130 and 502 for use in fixed guideway transit systems and road tunnels
- ANSI/ICEA, S-104-696, Telcordia and GR-20-CORE
- Sunlight Resistant Jacket
- Oil Res II Compliant Jacketing System
- Zero Halogen Per MIL PRF 85045

Cable Components



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

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.

Gel-Free LSZH Non-Armored Loose Tube (LL Series Gel-Free SJ)

Mechanical Data

AFL NO.	FIBER COUNT	NO. OF TUBES FIBERS/ TUBE	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
LL012★C5101N1D	12	1/12 (4 fillers)	0.39 (9.8)	49 (73)	600 (2670)	180 (800)	7.8 (20)	3.9 (10)
LL024★C5101N1D	24	2/12 (3 fillers)	0.39 (9.8)	49 (72)	600 (2670)	180 (800)	7.8 (20)	3.9 (10)
LL036★C5101N1D	36	3/12 (2 fillers)	0.39 (9.8)	48 (72)	600 (2670)	180 (800)	7.8 (20)	3.9 (10)
LL048★C5101N1D	48	4/12 (1 filler)	0.39 (9.8)	48 (71)	600 (2670)	180 (800)	7.8 (20)	3.9 (10)
LL060★C5101N1D	60	5/12 (no fillers)	0.39 (9.8)	48 (71)	600 (2670)	180 (800)	7.8 (20)	3.9 (10)
LL072★C6101N1D	72	6/12 (no fillers)	0.42 (10.6)	55 (82)	600 (2670)	180 (800)	8.4 (21)	4.2 (11)
LL096★C8101N1D	96	8/12 (no fillers)	0.48 (12.3)	75 (118)	600 (2670)	180 (800)	9.6 (25)	4.8 (12)
LL144★CC101N1D	144	12/12 (no fillers)	0.62 (15.8)	119 (178)	600 (2670)	180 (800)	12.4 (32)	6.2 (16)
LL216★C1301N1D	216	18/12 (no fillers)	0.62 (15.8)	110 (163)	600 (2670)	180 (800)	12.4 (32)	6.2 (16)
LL288★C0301N1D	288	24/12 (no fillers)	0.75 (19.1)	148 (220)	600 (2670)	180 (800)	15.0 (38)	7.5 (19)

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

Gel-Free LSZH Single-Jacket Single-Armor Loose Tube (LL Series Gel-Free SASJ)

Mechanical Data

AFL NO.	FIBER COUNT	NO. OF TUBES FIBERS/ TUBE	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
LL012★C5201S1D	12	1/12 (4 fillers)	0.50 (12.6)	95 (141)	600 (2670)	180 (800)	10.0 (25)	5.0 (13)
LL024★C5201S1D	24	2/12 (3 fillers)	0.50 (12.6)	95 (141)	600 (2670)	180 (800)	10.0 (25)	5.0 (13)
LL036★C5201S1D	36	3/12 (2 fillers)	0.50 (12.6)	94 (140)	600 (2670)	180 (800)	10.0 (25)	5.0 (13)
LL048★C5201S1D	48	4/12 (1 filler)	0.50 (12.6)	94 (140)	600 (2670)	180 (800)	10.0 (25)	5.0 (13)
LL060★C5201S1D	60	5/12 (no fillers)	0.50 (12.6)	94 (139)	600 (2670)	180 (800)	10.0 (25)	5.0 (13)
LL072★C6201S1D	72	6/12 (no fillers)	0.53 (13.4)	105 (156)	600 (2670)	180 (800)	10.6 (27)	5.3 (13)
LL096★C8201S1D	96	8/12 (no fillers)	0.59 (15.0)	127 (189)	600 (2670)	180 (800)	11.8 (30)	5.9 (15)
LL144★CC201S1D	144	12/12 (no fillers)	0.73 (18.5)	182 (271)	600 (2670)	180 (800)	14.6 (37)	7.3 (19)

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
 Q = Non-zero dispersion-shifted single-mode
 K = SM Futureguide SR-15e Bend Insensitive