

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

AFL's 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 with 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.

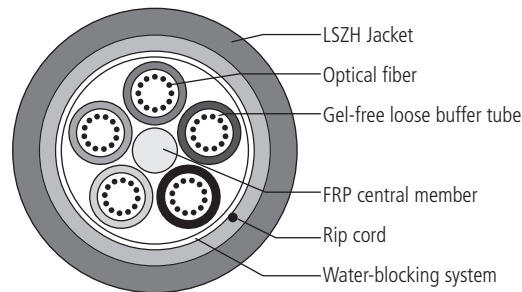
### Features

- 6 to 144 fibers
- Gel-free buffer tubes for ease of fiber prep
- Reverse-oscillated (SZ stranded) core to allow slack for mid-span fiber access
- UV-stabilized outer jacket

### Applications

- Industrial
- Electric utility
- Mining
- Mass transit

### 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
(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.

*continued*  
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### Mechanical Data

AFL NO.	FIBER COUNT	NO. OF TUBES		NOMINAL DIAMETER	NOMINAL WEIGHT	MAXIMUM TENSILE LOAD		MINIMUM BEND RADIUS	
		FIBERS/ TUBE	INCHES (MM)	LBS/1,000FT (KG/KM)	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)	

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  
 6 = 62.5/125 μm multimode GIGA-Link™ 300  
 8 = 62.5/125 μm multimode GIGA-Link™ 1000

### Recommended Products for LSZH Loose Tube Cable

DESCRIPTION	AFL NO.
Extreme Low Temp LSZH Double Jacket I/O Loose Tube (LA Series)	See <a href="#">specification sheet</a> for AFL No.

### Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
Telcordia	GR-20-CORE	Cable
ICEA	S-104-696	Cable
IEEE	1202	Cable
UL	1685 (OFNG-LS)	Cable
CSA	22.2 (FT4)	Cable
NFPA	130 and 502	Cable
TIA	598-D	Fiber

### Temperature Specifications

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

Contact AFL for more details.