

## Extreme Low Temp LSZH Double Jacket I/O Loose Tube (LA Series)

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 for operation in extremely low temperatures, mechanically abusive installations, and highly caustic and acidic environments. 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 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 layer of aramid yarn between the inner and outer sheaths.

### Features

- 12 to 144 fibers
- Gel-filled and gel-free buffer tubes available
- 2x Crush Resistance compared to standard fiber optic cables
- 2x Cold Impact Resistance compared to standard fiber optic cables
- Self-supporting capability (contact AFL for more information)

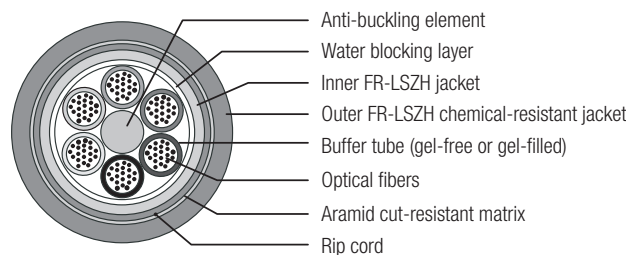
### Applications

- Oil and Gas fields
- Low Temperature Environments
- Refineries
- Mining
- Mass Transit

### Mechanical

PARAMETER	VALUE
Crush	440N/CM
Cold Impact	8.8 N*m

### Cable Components



### 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

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	NOMINAL DIAMETER		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD LBS (N)		MINIMUM BEND RADIUS INCHES (CM)	
		INCHES	MM	LBS/1,000 FT	KG/KM	INSTALLATION	OPERATION	INSTALLATION	OPERATION
<b>GEL-FREE</b>									
LA012★C6111N1D	12	0.575	14.6	140	209	990 (4400)	290 (1300)	13(29.4)	6 (14.6)
LA024★C6111N1D	24	0.575	14.6	139	207	990 (4400)	290 (1300)	13(29.4)	6 (14.6)
LA048★C6111N1D	48	0.575	14.6	136	202	990 (4400)	290 (1300)	13(29.4)	6 (14.6)
LA072★C6111N1D	72	0.575	14.6	133	197	990 (4400)	290 (1300)	13(29.4)	6 (14.6)
LA096★C8111N1D	96	0.638	16.2	156	233	990 (4400)	290 (1300)	15(32.6)	6 (16.2)
LA144★CC111N1D	144	0.776	19.7	199	297	990 (4400)	290 (1300)	18(396)	8 (19.7)
<b>GEL-FILLED</b>									
LA012★C6111N1	12	0.606	15.4	154	229	1000 (4,450)	400 (1,780)	13 (31)	6 (16)
LA024★C6111N1	24	0.606	15.4	154	229	1000 (4,450)	400 (1,780)	13 (31)	6 (16)
LA048★C6111N1	48	0.606	15.4	153	227	1000 (4,450)	400 (1,780)	13 (31)	6 (16)
LA072★C6111N1	72	0.606	15.4	152	225	1000 (4,450)	400 (1,780)	13 (31)	6 (16)

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

### Recommended Products for LSZH Loose Tube Cable

DESCRIPTION	AFL NO.
XLPO LSZH I/O Loose Tube (LX Series)	See <a href="#">XLPO LSZH I/O Loose Tube (LX Series) specification sheet</a> for specific AFL No.

### Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
Telcordia	GR-20-CORE	Cable
ICEA	S-104-696	Cable
IEEE	1202	Cable
UL	1651 and 1685 (OFNG-LS)	Cable
CSA	22.2 (FT4)	Cable
NFPA	130	Cable
TIA	598-D	Fiber

### Temperature Specifications

TEMPERATURE RANGE	
Operation	-50°C to +70°C
Storage	-50°C to +70°C
Installation	-30°C to +50°C

Contact AFL for more details.