

OSP MicroCore® LM-Series

AFL OSP MicroCore® cable series is designed for outside plant installation in microduct conduit systems. The foundation of the design is the multi-fiber-set, gel-filled buffer tube construction. The kink-resistant buffer tube contains multiple 12-fiber sets of color-coded fibers. Each set within the buffer tube is grouped using dual color-coded binder threads. The dry-blocked core is made up of SZ-stranded buffer tubes around a central strength member. The low-friction, high-strength overall jacketing system protects the cable-core while providing an optimized cable package supporting high-speed, long-distance jetting performance. The unique, high-fiber density geometry yields a cable construction that can accommodate up to 432 fibers and can be blown into microducts ranging in inside diameters from 10 mm to 16 mm.

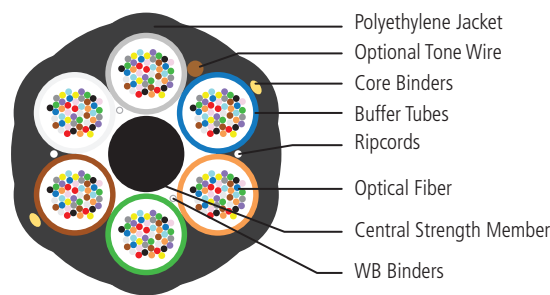
Features

- 12 up to 432 fibers
- Robust, kink-resistant buffer tubes reduce time and handling issues associated with enclosure build-outs
- 300lb installation tensile load rating
- OD compatible with 10 mm to 16 mm inside diameter microducts
- Toneable option includes a low-resistance copper wire that allows cable/pathway to be located using standard electromagnetic detector devices

Applications

- Long-haul, middle-mile and metro-loop
- Campus inter-building backbone distribution
- Low-cost fiber upgrade migration strategies

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

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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Mechanical Data

LM-SERIES AFL NO.*	FIBER COUNT	FIBERS/ NUMBER OF TUBES**	DIAMETER		WEIGHT LBS/1000FT (KG/KM)	MAXIMUM TENSILE LOAD LBS (N)		MINIMUM BEND RADIUS INCHES (CM)	
			INCHES (MM)	INCHES (MM)		INSTALLATION	OPERATION	INSTALLATION	OPERATION
LM012xC6101#S	12	12/1 (5 fillers)	0.299 (7.6)	0.394 (10.0)	31 (46)	300 (1334)	90 (400)	6 (15)	4.5 (12)
LM024xC6101#S	24	12/2 (4 fillers)	0.299 (7.6)	0.394 (10.0)	31 (46)	300 (1334)	90 (400)	6 (15)	4.5 (12)
LM048xC6101#S	48	12/4 (2 fillers)	0.299 (7.6)	0.394 (10.0)	31 (46)	300 (1334)	90 (400)	6 (15)	4.5 (12)
LM072xC6101#S	72	12/6	0.299 (7.6)	0.394 (10.0)	34 (51)	300 (1334)	90 (400)	6 (15)	4.5 (12)
LM096xO6101#S	96	24/4 (2 fillers)	0.311 (7.9)	0.394 (10.0)	34 (51)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM144xO6101#S	144	24/6	0.311 (7.9)	0.394 (10.0)	36 (53)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM288xR6101#S	288	48/6	0.409 (10.4)	0.512 (13.0)	63 (93)	300 (1334)	90 (400)	8.5 (21)	6.5 (16)
LM432xOI301#S	432	24/18	0.496 (12.6)	0.630 (16.0)	87 (130)	300 (1334)	90 (400)	10 (26)	7.5 (19)

* Replace "x" in AFL number with number in the Fiber Specifications table on previous page.

Replace # with "N" for all-dielectric cable or "T" for toneable option.

** Fibers are arranged in 12-fiber sets. Each set is identified by colored binder threads.

OSP MicroCore Cable Packaging

DIMENSIONS	STANDARD REEL LENGTH	REEL WEIGHT
58 x 32 x 28 in.	20000 ft (6,096 m)	435 lbs (197 kg)

Recommended Products

DESCRIPTION	AFL NO.
LightGuard® 350 Sealed Fiber Optic Splice Closure	Refer to spec sheet for AFL No.
FUSEConnect® MPO Splice-on Connectors	Refer to spec sheet for AFL No.
FUSConnect® Field-installable Splice-on Connectors	Refer to spec sheet for AFL No.
LMHD-Series OSP MicroCore® Cable	Refer to spec sheet for AFL No.
Poli-MOD® Patch and Splice Module	Refer to spec sheet for AFL No.

Temperature Specifications

TEMPERATURE RANGE	
Operation	-30°C to +70°C
Storage	-30°C to +75°C
Installation	-10°C to +40°C

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
Telcordia	GR-20-CORE	Water-Blocked Cabled Buffer Tube Core
TIA	598-D	Fiber

Contact AFL for further details.