OSP MicroCore® LM-Series

AFL OSP MicroCore® cable series is designed for outside plant installation in microduct conduit systems. The unique, high-fiber density geometry yields a cable construction that can safely accommodate 12 up to 432 fibers and can be blown into microducts ranging in inside diameters from 10 mm to 16 mm.

For example, with a 7-way 12.7 mm x 10 mm (conduit with seven microducts) in place, the system designer has the flexibility to install from 12 to 144 fibers per microduct. With this approach, only the number of fibers required for initial networking requirements need to be installed. Then as future network upgrades and expansions are required, the spare microducts can be jetted with addition OSP MicroCore cables without having to add additional pathway space.

Applications

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

Features

- GR-20 compliant water-blocked cable core and buffer tubes
- Colored binder threads for easily identifiable optical fiber bundles
- High installation tensile load rating
- OD compatible with 10 mm to 16 mm inside diameter microducts
- 12 up to 432 fibers

Fiber Specifications

	MAXIMUM ATTENUATION (DB/KM)				OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM)		GIGABIT ETHERNET MIN. LINK DISTANCE (METERS)	
FIBER TYPE	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/ TUBE	NOMINAL DIAMETER		MIN. DUCT I.D.		NOMINAL WEIGHT		MAXIMUM TENSILE LOAD LBS (KG)		MINIMUM BEND RADIUS INCHES (CM)	
			IN.	MM	IN.	MM	LBS/1,000 FT	KG/KM	INSTALLATION	OPERATION	INSTALLATION	OPERATION
LM012✶C6101NS	12	12/1 (5 fillers)	0.299	7.6	0.394	10	31	46	300 (136)	90 (41)	5 (13)	4 (10)
LM024✶C6101NS	24	12/2 (4 fillers)	0.299	7.6	0.394	10	31	46	300 (136)	90 (41)	5 (13)	4 (10)
LM048✶C6101NS	48	12/4 (2 fillers)	0.299	7.6	0.394	10	31	47	300 (136)	90 (41)	5 (13)	4 (10)
LM072✶C6101NS	72	12/6 (no fillers)	0.299	7.6	0.394	10	34	51	300 (136)	90 (41)	5 (13)	4 (10)
LM096✶O6101NS	96	24/4 (2 fillers)	0.311	7.9	0.394	10	34	51	300 (136)	90 (41)	7 (16)	5 (13)
LM144✶O6101NS	144	24/6 (no fillers)	0.311	7.9	0.394	10	36	53	300 (136)	90 (41)	7 (16)	5 (13)
LM288✶R6101NS	288	48/6 (no fillers)	0.409	10.4	0.512	13	63	93	350 (150)	100 (45)	9 (21)	7 (17)
LM432✶OI301NS	432	24/18 (no fillers)	0.496	12.6	0.630	16	87	130	300 (136)	90 (41)	10 (26)	8 (21)

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

Temperature Specifications

TEMPERATURE RANGE	
INSTALLATION	-10°C to +40°C
OPERATING	-30°C to +70°C
STORAGE	-30°C to +75°C

Standard P-U

Length	6,000 m (20,000 ft)
Reel Type	Wood
Reel Size	58 x 32 x 28 in.