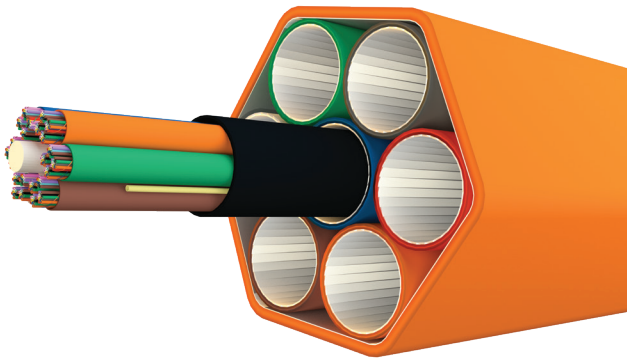
LM-Series OSP MicroCore® Cable



AFL OSP MicroCore® cable series (LM-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.

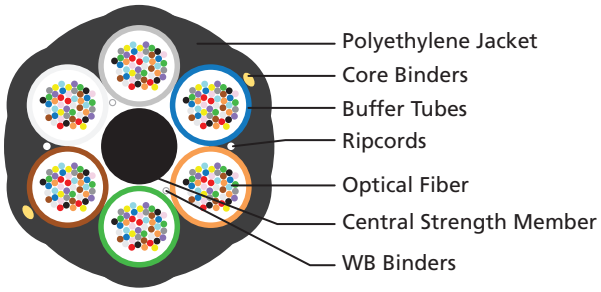
Features

- Build America/Buy America options available
- 12 up to 432 250 µm fibers
- Low-friction outer jacket designed for air-blown installations
- 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

Applications

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

Cable Components



AFL CERTIFIED BEAD COMPLIANT

AFL CERTIFIED BABA COMPLIANT

continued

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LM-Series OSP MicroCore® Cable

Mechanical Data

AL No.	Fiber Count	No. of Tubes	Nominal Diameter	Min. Microduct Inner Diameter	Nominal Weight	Maximum Tensile Load Lbs (N)		Minimum Bend Radius Inches (cm)	
		Fibers/ Tube***	Inches (mm)	Inches (mm)	Lbs/1000ft (kg/km)	Short Term	Long Term	Short Term	Long Term
LM012xC6101NS**	12	1-12 (5 fillers)	0.31 (7.9)	0.39 (10.0)	31 (46)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM024xC6101NS**	24	2-12 (4 fillers)	0.31 (7.9)	0.39 (10.0)	32 (48)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM048xC6101NS**	48	4-12 (2 fillers)	0.31 (7.9)	0.39 (10.0)	33 (49)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM072xC6101NS**	72	6-12	0.31 (7.9)	0.39 (10.0)	34 (51)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM096xO6101NS**	96	4-24 (2 fillers)	0.31 (7.9)	0.39 (10.0)	34 (51)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM144xO6101NS**	144	6-24	0.31 (7.9)	0.39 (10.0)	36 (53)	300 (1334)	90 (400)	6.5 (16)	5 (12)
LM288xR6101NS**	288	6-48	0.41 (10.4)	0.51 (13.0)	63 (93)	300 (1334)	90 (400)	8.5 (21)	6.5 (16)
LM432xOI301NS**	432	18-24	0.50 (12.6)	0.63 (16.0)	87 (190)	300 (1334)	90 (400)	10 (26)	7.5 (19)

Note: Diameter and weight subject to change without notice

* Fiber Types - Replace "x" in AFL number with number in the Fiber Specifications table below.

** For BABA-Compliant Part Number, add "-B" to end of part number.

*** Fibers are arranged in 12-fiber sets identified by colored binder threads. For fiber identification details click here.

Fiber Specifications

Fiber Type	"x"	Standard	Mode Field Diameter	Attenuation	
				1300 nm	1550 nm
250 µm Single-mode	9	ITU-T G.652D/657.A1	9.2 um nominal	0.35	0.25
Corning 250 µm Single-mode	AZ	ITU-T G.652D/657.A1	9.2 um nominal	0.35	0.25
BABA-Compliant 250 µm Single-mode	BK	ITU-T G.652D/657.A1	9.2 um nominal	0.35	0.25
BABA-Compliant Corning 250 µm Single-mode	BL	ITU-T G.652D/657.A1	9.2 um nominal	0.35	0.25

Standard Packaging Details

Fiber Count	Reel Dimensions (Flange X Width)	Standard Reel Length	Typical Total Weight
12-144	48 x 36 in.	20,000 ft (6,096 m)	950 lbs (430 kg)
288	58 x 38 in.	20,000 ft (6,096 m)	1,800 lbs (816 kg)
432	66 x 42 in.	20,000 ft (6,096 m)	2,450 lbs (1,111 kg)

Temperature Specifications

Temperature Range	
Operation	-30°C to +70°C
Storage	-30°C to +70°C
Installation	-10°C to +60°C

Recommended Products

Description	AFL No.
Apex® X-2 Sealed Splice Closure	Refer to spec sheet for AFL No.
Apex® X-2S Sealed Splice Closure	Refer to spec sheet for AFL No.
FUSEConnect® MPO Splice-on Connectors	Refer to spec sheet for AFL No.
FUSEConnect® 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.

Qualifications

Governing Body	Standard Code	Component
ANSI/ICEA	S-122-744	Cable
TIA	598-D	Fiber

Contact AFL for further details.

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