



## 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.

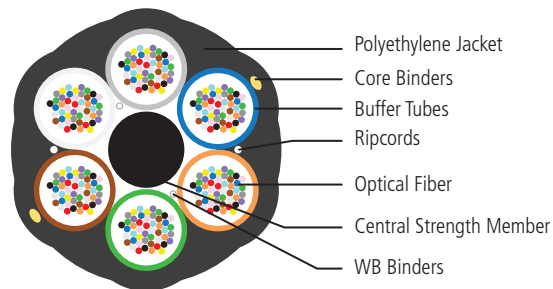
### Features

- 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



*continued*  
→

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### Physical and Mechanical Data

| LM-SERIES<br>AFL NO.* | FIBER<br>COUNT | FIBERS/<br>NUMBER OF<br>TUBES** | DIAMETER    |             | MIN. MICRODUCT<br>INNER DIAMETER | WEIGHT     | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |           |
|-----------------------|----------------|---------------------------------|-------------|-------------|----------------------------------|------------|----------------------|-----------|---------------------|-----------|
|                       |                |                                 | INCHES (MM) | INCHES (MM) |                                  |            | LBS (N)              |           | INCHES (CM)         |           |
|                       |                |                                 |             |             |                                  |            | INSTALLATION         | OPERATION | INSTALLATION        | OPERATION |
| LM012xC6101NS         | 12             | 12/1 (5 fillers)                | 0.31 (7.9)  | 0.39 (10.0) | 31 (46)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM024xC6101NS         | 24             | 12/2 (4 fillers)                | 0.31 (7.9)  | 0.39 (10.0) | 32 (48)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM048xC6101NS         | 48             | 12/4 (2 fillers)                | 0.31 (7.9)  | 0.39 (10.0) | 33 (49)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM072xC6101NS         | 72             | 12/6                            | 0.31 (7.9)  | 0.39 (10.0) | 34 (51)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM096xO6101NS         | 96             | 24/4 (2 fillers)                | 0.31 (7.9)  | 0.39 (10.0) | 34 (51)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM144xO6101NS         | 144            | 24/6                            | 0.31 (7.9)  | 0.39 (10.0) | 36 (53)                          | 300 (1334) | 90 (400)             | 6.5 (16)  | 5 (12)              |           |
| LM288xR6101NS         | 288            | 48/6                            | 0.41 (10.4) | 0.51 (13.0) | 63 (93)                          | 300 (1334) | 90 (400)             | 8.5 (21)  | 6.5 (16)            |           |
| LM432xOI301NS         | 432            | 24/18                           | 0.50 (12.6) | 0.63 (16.0) | 87 (130)                         | 300 (1334) | 90 (400)             | 10 (26)   | 7.5 (19)            |           |

\* Replace "x" in AFL number with Fiber Identifier in the Fiber Specifications table below.

\*\* Fibers are arranged in 12-fiber sets identified by colored binder threads. For fiber identification details [click here](#).

### Optical Fiber Options

| 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 µm nominal      | 0.35        | 0.25    |
| Corning 250 µm Single-mode | AZ  | ITU-T G.652D / 657.A1 | 9.2 µm 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) |

### Recommended Products

| DESCRIPTION   | AFL NO.   |
|---|---|
| Apex® X-2 Sealed Splice Closure                     | Refer to <a href="#">spec sheet</a> for AFL No. |
| Apex® X-2S Sealed Splice Closure                    | Refer to <a href="#">spec sheet</a> for AFL No. |
| FUSEConnect® MPO Splice-on Connectors               | Refer to <a href="#">spec sheet</a> for AFL No. |
| FUSEConnect® Field-installable Splice-on Connectors | Refer to <a href="#">spec sheet</a> for AFL No. |
| LMHD-Series OSP MicroCore® Cable                    | Refer to <a href="#">spec sheet</a> for AFL No. |
| Poli-MOD® Patch and Splice Module                   | Refer to <a href="#">spec sheet</a> for AFL No. |

### Temperature Specifications

| TEMPERATURE RANGE |                |
|-------------------|----------------|
| OPERATION         | -30°C to +70°C |
| STORAGE           | -30°C to +70°C |
| INSTALLATION      | -10°C to +60°C |

### Qualifications

| GOVERNING BODY | STANDARD CODE | COMPONENT |
|----------------|---------------|-----------|
| ANSI/ICEA      | S-122-744     | Cable     |
| TIA            | 598-D         | Fiber     |

Contact AFL for further details.