

All-Dielectric Armored Rodent-Resistant OSP Loose Tube (LN Series)

AFL's All-dielectric Rodent-Resistant cable is designed specifically for environments that have an increased risk of rodent infestation and disturbance. The LN-series product line covers the range of fiber-counts of up to 576 fibers. The ultra-hard, non-metallic outer polymer shell reduces risk of transmission interruptions in vital OSP network interconnections. In addition, the cable line meets all applicable RUS, GR-20 and IEC and TIA related design and performance guidelines.

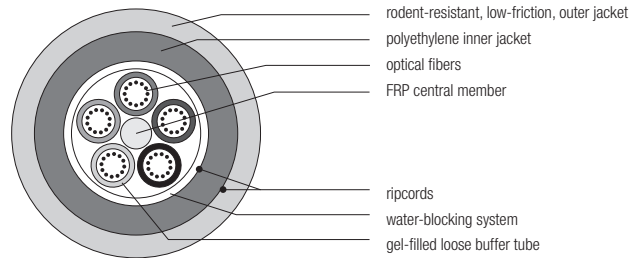
Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Steam-tunnel Substreet Drainage Networks
- Local Loop
- Airport (FAA-E-2761c, Type B)

Temperature Specifications

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

Cable Components



Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* | | | |
|-------------|------------------|--------|-----------|--------|
| | SINGLE-MODE | | MULTIMODE | |
| | FEET | METERS | FEET | METERS |
| 6 - 60 | 22,900 | 7,000 | 22,900 | 8,000 |
| 72 - 96 | 22,900 | 7,000 | 22,900 | 7,000 |
| 108 - 120 | 22,900 | 7,000 | 22,900 | 7,000 |
| 132 - 144 | 22,600 | 6,900 | 22,600 | 6,900 |
| 146 - 216 | 17,000 | 5,200 | 17,000 | 5,200 |
| 218 - 288 | 15,000 | 4,600 | 15,000 | 4,600 |
| 290 - 432 | 10,800 | 3,300 | 10,800 | 3,300 |
| 434 - 576 | 6,500 | 2,000 | 6,500 | 2,000 |

* Longer lengths may be available upon request.

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 |
| (K) AFL G.657.A1 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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Ordering Information

| AFL NO. | FIBER COUNT | NUMBER OF TUBES/FIBERS | NOMINAL DIAMETER | | NOMINAL WEIGHT | | MAXIMUM TENSILE LOAD | | MINIMUM BEND RADIUS | |
|---------------|-------------|------------------------|------------------|------|----------------|-------|----------------------|-----------|---------------------|-----------|
| | | | INCHES | MM | LBS/1,000FT | KG/KM | LBS (N) | | INCHES (CM) | |
| | | | | | | | SHORT TERM | LONG TERM | SHORT TERM | LONG TERM |
| LN006★C5101N1 | 6 | 1w/6 (4 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN012★C5101N1 | 12 | 1w/12 (4 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN018★C5101N1 | 18 | 1w/12,1w/6 (3 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN024★C5101N1 | 24 | 2w/12 (3 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN030★C5101N1 | 30 | 2w/12,1w/6 (2 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN036★C5101N1 | 36 | 3w/12 (2 fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN048★C5101N1 | 48 | 4w/12 (1 filler) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN060★C5101N1 | 60 | 5w/12 (no fillers) | 0.49 | 12.5 | 56 | 84 | 600 (2670) | 200 (890) | 9.8 (25) | 4.9 (13) |
| LN072★C6101N1 | 72 | 6w/12 (no fillers) | 0.53 | 13.4 | 65 | 97 | 600 (2670) | 200 (890) | 10.6 (27) | 5.3 (14) |
| LN084★C8101N1 | 84 | 7w/12 (1 filler) | 0.60 | 15.2 | 81 | 121 | 600 (2670) | 200 (890) | 12.0 (31) | 6.0 (16) |
| LN096★C8101N1 | 96 | 8w/12 (no fillers) | 0.60 | 15.2 | 81 | 121 | 600 (2670) | 200 (890) | 12.0 (31) | 6.0 (16) |
| LN108★CA101N1 | 108 | 9w/12 (1 filler) | 0.67 | 17.1 | 101 | 151 | 600 (2670) | 200 (890) | 13.4 (34) | 6.7 (17) |
| LN120★CA101N1 | 120 | 10w/12 (no fillers) | 0.67 | 17.1 | 101 | 151 | 600 (2670) | 200 (890) | 13.4 (34) | 6.7 (17) |
| LN132★CC101N1 | 132 | 11w/12 (1 filler) | 0.75 | 19.0 | 123 | 184 | 600 (2670) | 200 (890) | 15.0 (38) | 7.5 (19) |
| LN144★CC101N1 | 144 | 12w/12 (no fillers) | 0.75 | 19.0 | 123 | 184 | 600 (2670) | 200 (890) | 15.0 (38) | 7.5 (19) |
| LN216★CI301N1 | 216 | 18w/12 (no fillers) | 0.76 | 19.3 | 125 | 187 | 600 (2670) | 200 (890) | 15.2 (39) | 7.6 (20) |
| LN288★CO301N1 | 288 | 24w/12 (no fillers) | 0.87 | 22.0 | 156 | 234 | 600 (2670) | 200 (890) | 17.4 (44) | 8.7 (22) |
| LN432★IO301N1 | 432 | 24w/18 (no fillers) | 0.94 | 23.9 | 183 | 273 | 600 (2670) | 200 (890) | 18.8 (48) | 9.4 (24) |
| LN576★OO301N1 | 576 | 24w/24 (no fillers) | 1.07 | 27.3 | 243 | 303 | 600 (2670) | 200 (890) | 21.4 (55) | 10.7 (28) |

Note: Diameter and weight subject to change without notice

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

Reel Information

| ITEM | REEL A | | REEL B | | REEL C | | REEL D | | REEL E | |
|--------------------------|---------|-------|---------|--------|---------|--------|---------|--------|---------|--------|
| | INCHES | CM | INCHES | CM | INCHES | CM | INCHES | CM | INCHES | CM |
| Reel Height | 42 | 106.7 | 58 | 147.3 | 66 | 167.6 | 72 | 182.8 | 84 | 213.4 |
| Reel Width Outside | 36 | 91.4 | 38 | 96.5 | 42 | 106.7 | 42 | 106.7 | 40 | 101.6 |
| Reel Width Inside | 32 | 81.6 | 32 | 81.3 | 36 | 91.4 | 36 | 91.4 | 34 | 86.4 |
| Drum Diameter | 23 | 58.7 | 28 | 71.1 | 36 | 91.4 | 36 | 91.4 | 35 | 88.9 |
| Arbor Hole Diameter | 3 | 7.9 | 3 | 7.9 | 3 | 7.9 | 3 | 7.9 | 3 | 7.9 |
| Reel Weight With Lagging | 180 lbs | 82 kg | 420 lbs | 191 kg | 685 lbs | 311 kg | 710 lbs | 320 kg | 950 lbs | 431 kg |

AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.