



## **AERIAL FIBER OPTIC CABLE**

Optical Ground Wire | AFL-ADSS® | SkyWrap® | Loose Tube

AFL is a value-added supplier. We strive to provide more than just a product, looking far beyond the current sale in an effort to build long-term business relationships with our customers. By choosing AFL Aerial Fiber Optic Cable products, you are selecting a true partner for your optical network needs. We bring the following benefits to you as part of our effort to demonstrate our commitment to our customers:

- Nearly three decades of market leadership and proven product reliability
- Global manufacturing presence with cable facilities in the US, Germany, UK and Asia
- World's largest production capacity for Optical Ground Wire (OPGW) and world's largest installed base of OPGW
- Vertically integrated supply of critical raw materials including optical fiber and wire
- Providing system solutions – cable, hardware, splicing and testing equipment, training and connectivity products
- Strong financial standing allows us to continue investing and growing
- Environmental awareness with defined metrics toward reducing our impact
- Applications and field engineers on staff to help find the right solution for you and to help you deploy the asset after the purchase



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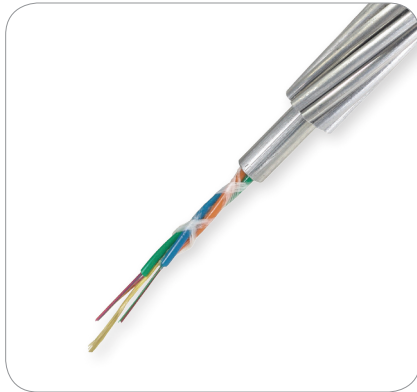
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### Temperature Range

Operating - 40°C to + 85°C  
 Storage - 50°C to + 85°C  
 Installation - 30°C to + 85°C

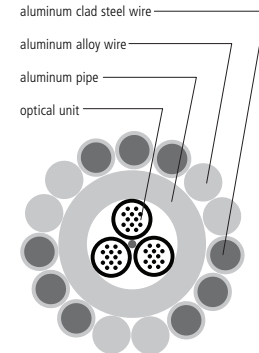
## AlumaCore OPGW

AlumaCore Optical Ground Wire is preferred for its performance under the most rugged conditions. Its central aluminum pipe provides superb fiber protection making it ideal for everything from basic installations to those applications requiring high tensions or for extremely long spans.

### Features

- Fiber counts up to 96
- Optical unit provides exceptional mechanical and thermal protection for fibers
- Thick-walled aluminum pipe provides hermetic seal for optical units, excellent crush resistance and low resistivity
- Stranded wires selected to optimize mechanical and electrical properties
- Dielectric optical units are available with 6, 8, 12, 18 and 24 fibers
- Supplied with up to 4 optical units, depending on fiber count

### Cable Components

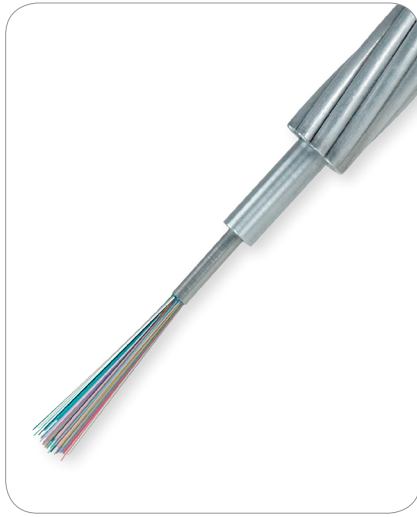


### Typical Designs

| FIBERS<br>(max) | OPGW<br>SIZE | FAULT<br>CURRENT      | TOTAL CONDUCTOR<br>AREA |                 | OVERALL<br>DIAMETER |      | WEIGHT |       | RBS    |        | SAG10<br>CHART # | MAX SHIP LENGTH<br>(per reel type) |           |
|-----------------|--------------|-----------------------|-------------------------|-----------------|---------------------|------|--------|-------|--------|--------|------------------|------------------------------------|-----------|
|                 |              | (kA) <sup>2</sup> sec | in <sup>2</sup>         | mm <sup>2</sup> | in                  | mm   | lbs/ft | kg/m  | lbs    | kgf    |                  | Wood (m)                           | Steel (m) |
| 8               | AC-53/449    | 39                    | 0.1166                  | 75.24           | 0.449               | 11.4 | 0.282  | 0.420 | 15,122 | 6,860  | 1-1453           | 7,000                              | 7,000     |
| 8               | AC-27/27/449 | 48                    | 0.1166                  | 75.24           | 0.449               | 11.4 | 0.211  | 0.315 | 9,679  | 4,390  | 1-1439           | 7,000                              | 7,000     |
| 8               | AC-86/535    | 74                    | 0.1677                  | 108.17          | 0.535               | 13.6 | 0.430  | 0.640 | 22,879 | 10,378 | 1-1442           | 5,500                              | 5,500     |
| 8               | AC-43/43/535 | 96                    | 0.1677                  | 108.17          | 0.535               | 13.6 | 0.315  | 0.469 | 14,539 | 6,595  | 1-1170           | 5,500                              | 5,500     |
| 12              | AC-57/465    | 41                    | 0.1210                  | 78.08           | 0.465               | 11.8 | 0.300  | 0.447 | 16,214 | 7,355  | 1-1421           | 7,000                              | 7,000     |
| 12              | AC-29/29/465 | 51                    | 0.1210                  | 78.08           | 0.465               | 11.8 | 0.224  | 0.333 | 10,344 | 4,692  | 1-1439           | 7,000                              | 7,000     |
| 12              | AC-72/504    | 56                    | 0.1445                  | 93.21           | 0.504               | 12.8 | 0.368  | 0.548 | 20,329 | 9,221  | 1-1442           | 6,500                              | 7,000     |
| 12              | AC-32/40/504 | 70                    | 0.1445                  | 93.21           | 0.504               | 12.8 | 0.282  | 0.420 | 13,732 | 6,229  | 1-917            | 7,000                              | 7,000     |
| 24              | AC-64/528    | 68                    | 0.1510                  | 97.43           | 0.528               | 13.4 | 0.359  | 0.535 | 18,391 | 8,342  | 1-1450           | 6,700                              | 7,000     |
| 24              | AC-29/34/528 | 81                    | 0.1510                  | 97.43           | 0.528               | 13.4 | 0.281  | 0.418 | 12,351 | 5,602  | 1-1439           | 7,000                              | 7,000     |
| 24              | AC-74/552    | 81                    | 0.1666                  | 107.51          | 0.552               | 14.0 | 0.405  | 0.602 | 21,132 | 9,585  | 1-1453           | 6,000                              | 7,000     |
| 24              | AC-37/37/552 | 98                    | 0.1666                  | 107.51          | 0.552               | 14.0 | 0.306  | 0.455 | 13,556 | 6,149  | 1-1438           | 7,000                              | 7,000     |
| 36              | AC-71/571    | 95                    | 0.1758                  | 113.39          | 0.571               | 14.5 | 0.411  | 0.611 | 20,546 | 9,320  | 1-1461           | 5,900                              | 7,000     |
| 36              | AC-33/38/571 | 110                   | 0.1758                  | 113.39          | 0.571               | 14.5 | 0.323  | 0.480 | 13,779 | 6,250  | 1-1438           | 7,000                              | 7,000     |
| 36              | AC-86/607    | 118                   | 0.2002                  | 129.14          | 0.607               | 15.4 | 0.481  | 0.716 | 24,829 | 11,263 | 1-1457           | 5,000                              | 6,900     |
| 36              | AC-40/47/607 | 141                   | 0.2002                  | 129.14          | 0.607               | 15.4 | 0.375  | 0.558 | 16,646 | 7,551  | 1-1439           | 6,500                              | 7,000     |
| 48              | AC-86/646    | 151                   | 0.2208                  | 142.43          | 0.646               | 16.4 | 0.509  | 0.757 | 25,098 | 11,384 | 1-1461           | 4,700                              | 6,600     |
| 48              | AC-34/52/646 | 172                   | 0.2208                  | 142.43          | 0.646               | 16.4 | 0.417  | 0.621 | 18,053 | 8,189  | 1-1439           | 5,800                              | 7,000     |
| 48              | AC-129/724   | 239                   | 0.2876                  | 185.57          | 0.724               | 18.4 | 0.703  | 1.046 | 35,034 | 15,891 | 1-1453           | 3,400                              | 4,700     |
| 48              | AC-65/65/724 | 292                   | 0.2876                  | 185.57          | 0.724               | 18.4 | 0.530  | 0.789 | 22,524 | 10,217 | 1-1438           | 4,500                              | 5,500     |
| 72              | AC-88/659    | 154                   | 0.2232                  | 143.98          | 0.659               | 16.7 | 0.516  | 0.768 | 25,556 | 11,592 | 1-1461           | 4,700                              | 6,500     |
| 72              | AC-38/49/659 | 177                   | 0.2232                  | 143.98          | 0.659               | 16.7 | 0.414  | 0.615 | 17,698 | 8,028  | 1-1438           | 5,800                              | 6,800     |
| 72              | AC-102/691   | 182                   | 0.2460                  | 158.96          | 0.691               | 17.5 | 0.582  | 0.866 | 29,555 | 13,406 | 1-1450           | 4,100                              | 5,700     |
| 72              | AC-44/58/691 | 212                   | 0.2460                  | 158.96          | 0.691               | 17.5 | 0.465  | 0.692 | 20,566 | 9,329  | 1-1439           | 5,200                              | 6,800     |
| 96              | AC-79/637    | 138                   | 0.2095                  | 135.14          | 0.637               | 16.2 | 0.4829 | 0.719 | 23,150 | 10,501 | 1-1166           | 5,000                              | 6,800     |
| 96              | AC-39/39/637 | 159                   | 0.2095                  | 135.14          | 0.637               | 16.2 | 0.3778 | 0.562 | 15,077 | 6,839  | 1-1441           | 6,400                              | 6,800     |
| 96              | AC-125/726   | 230                   | 0.2813                  | 181.48          | 0.726               | 18.4 | 0.6919 | 1.030 | 34,882 | 15,823 | 1-1453           | 3,500                              | 4,800     |
| 96              | AC-58/67/726 | 277                   | 0.2813                  | 181.48          | 0.726               | 18.4 | 0.5378 | 0.800 | 23,286 | 10,562 | 1-1439           | 4,500                              | 6,100     |

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these catalog designs can be found on PLS-CADD web page.

**NOTE:** The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.



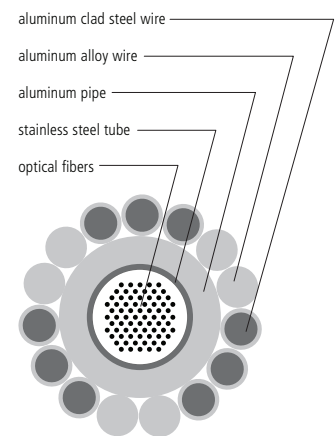
### CentraCore OPGW

CentraCore Optical Ground Wire is available in fiber counts up to 72, and due to its small size, offers a unique solution to the diameter and weight concerns on many of today's overloaded towers. A central stainless steel tube houses the optical fibers. The stainless steel tube is then inserted into an aluminum pipe which provides added crush protection while increasing the conductivity. The fibers are protected from environmental conditions (lightning, short circuit, loading) to ensure reliability and longevity.

#### Features

- Fiber counts up to 72
- Very small diameter, low weight
- Laser-welded, hermetically sealed stainless steel tubes provide mechanical and thermal protection for optical fibers
- Central tube provides mechanical and thermal protection for optical fibers
- Excellent crush resistance and high fault current rating capability
- Unique designs have maximum allowable tension to control fiber strain
- Stranded wires selected to optimize mechanical and electrical properties of cable

#### Cable Components



#### Temperature Range

Operating - 40°C to + 85°C

Storage - 50°C to + 85°C

Installation - 30°C to + 85°C

#### Typical Designs

| FIBERS<br>(max) | OPGW<br>SIZE | FAULT<br>CURRENT | TOTAL CONDUCTOR AREA |        | OVERALL<br>DIAMETER |       | WEIGHT |       | RBS    |       | SAG10<br>CHART # | MAX SHIP LENGTH<br>(per reel type) |           |
|-----------------|--------------|------------------|----------------------|--------|---------------------|-------|--------|-------|--------|-------|------------------|------------------------------------|-----------|
|                 |              | (kA)²sec         | in²                  | mm²    | in                  | mm    | lbs/ft | kg/m  | lbs    | kgf   |                  | Wood (m)                           | Steel (m) |
| 48              | CC-57/465    | 43               | 0.1248               | 80.52  | 0.465               | 11.80 | 0.314  | 0.467 | 16,626 | 7,541 | 1-1421           | 7000                               | 7000      |
| 48              | CC-29/29/465 | 54               | 0.1248               | 80.52  | 0.465               | 11.80 | 0.238  | 0.354 | 10,755 | 4,878 | 1-1455           | 7000                               | 7000      |
| 48              | CC-54/472    | 53               | 0.1339               | 86.39  | 0.472               | 12.00 | 0.317  | 0.471 | 16,089 | 7,298 | 1-1450           | 7000                               | 7000      |
| 48              | CC-27/27/472 | 63               | 0.1339               | 86.39  | 0.472               | 12.00 | 0.244  | 0.364 | 10,523 | 4,773 | 1-1438           | 7000                               | 7000      |
| 48              | CC-63/496    | 63               | 0.1474               | 95.08  | 0.496               | 12.60 | 0.356  | 0.529 | 18,454 | 8,371 | 1-1453           | 6850                               | 7000      |
| 48              | CC-29/34/496 | 75               | 0.1474               | 95.08  | 0.496               | 12.60 | 0.280  | 0.416 | 12,584 | 5,708 | 1-1455           | 7000                               | 7000      |
| 48              | CC-72/504    | 58               | 0.1482               | 95.64  | 0.504               | 12.80 | 0.382  | 0.568 | 20,740 | 9,408 | 1-1442           | 6350                               | 7000      |
| 48              | CC-32/40/504 | 74               | 0.1482               | 95.64  | 0.504               | 12.80 | 0.296  | 0.441 | 14,144 | 6,416 | 1-1440           | 7000                               | 7000      |
| 48              | CC-75/528    | 77               | 0.1663               | 107.28 | 0.528               | 13.40 | 0.411  | 0.612 | 21,845 | 9,909 | 1-1453           | 5950                               | 7000      |
| 48              | CC-38/38/528 | 96               | 0.1663               | 107.28 | 0.528               | 13.40 | 0.310  | 0.462 | 14,106 | 6,398 | 1-1439           | 7000                               | 7000      |
| 72              | CC-54/472    | 51               | 0.1318               | 85.01  | 0.472               | 12.00 | 0.316  | 0.470 | 16,067 | 7,288 | 1-1457           | 7000                               | 7000      |
| 72              | CC-27/27/472 | 61               | 0.1318               | 85.01  | 0.472               | 12.00 | 0.243  | 0.362 | 10,501 | 4,763 | 1-1438           | 7000                               | 7000      |
| 72              | CC-63/496    | 60               | 0.1452               | 93.70  | 0.496               | 12.60 | 0.355  | 0.528 | 18,432 | 8,361 | 1-1453           | 6850                               | 7000      |
| 72              | CC-29/34/496 | 73               | 0.1452               | 93.70  | 0.496               | 12.60 | 0.278  | 0.414 | 12,561 | 5,698 | 1-1455           | 7000                               | 7000      |
| 72              | CC-63/507    | 71               | 0.1547               | 99.80  | 0.507               | 12.90 | 0.367  | 0.546 | 18,677 | 8,472 | 1-1450           | 6650                               | 7000      |
| 72              | CC-32/32/507 | 85               | 0.1547               | 99.80  | 0.507               | 12.90 | 0.282  | 0.420 | 12,195 | 5,532 | 1-1438           | 7000                               | 7000      |
| 72              | CC-75/528    | 75               | 0.1646               | 106.20 | 0.528               | 13.40 | 0.410  | 0.611 | 21,831 | 9,903 | 1-1421           | 5950                               | 7000      |
| 72              | CC-38/38/528 | 94               | 0.1646               | 106.20 | 0.528               | 13.40 | 0.310  | 0.461 | 14,092 | 6,392 | 1-1455           | 7000                               | 7000      |
| 72              | CC-73/532    | 84               | 0.1701               | 109.73 | 0.532               | 13.50 | 0.411  | 0.612 | 21,380 | 9,698 | 1-1453           | 5900                               | 7000      |
| 72              | CC-33/40/532 | 100              | 0.1701               | 109.73 | 0.532               | 13.50 | 0.323  | 0.480 | 14,561 | 6,605 | 1-1455           | 7000                               | 7000      |

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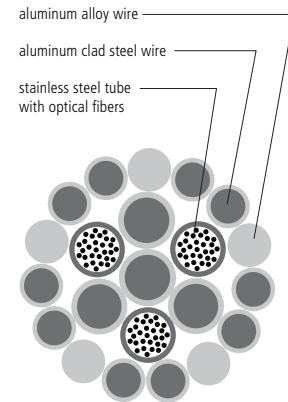
### HexaCore OPGW

HexaCore Optical Ground Wire cable houses and protects the optical fibers within gel-filled stainless steel tubes. Aluminum clad steel and aluminum alloy wires are stranded with the tubes to create a dual-layer design suitable for a variety of applications.

#### Features

- Fiber counts up to 432 or higher for custom designs
- Laser-welded, hermetically sealed stainless steel tubes provide mechanical and thermal protection for optical fibers
- High load, long span capability
- Anti-rotational devices usually not required for installation
- Each stainless steel tube is uniquely identified for organization at splice locations
- Stranded wires selected to optimize mechanical and electrical properties of cable

#### Cable Components



#### Temperature Range

Operating - 40°C to + 85°C

Storage - 50°C to + 85°C

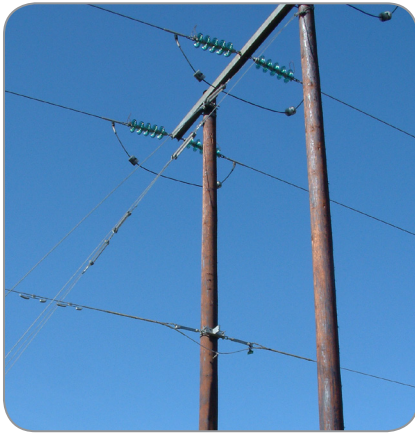
Installation - 30°C to + 85°C

#### Typical Designs

| FIBERS<br>(max) | OPGW<br>SIZE | FAULT<br>CURRENT<br>(kA) <sup>2</sup> sec | TOTAL CONDUCTOR<br>AREA |                 | OVERALL DIAMETER |      | WEIGHT |       | RBS    |        | SAG10<br>CHART # | MAX SHIP LENGTH<br>(per reel type) |           |
|-----------------|--------------|-------------------------------------------|-------------------------|-----------------|------------------|------|--------|-------|--------|--------|------------------|------------------------------------|-----------|
|                 |              |                                           | in <sup>2</sup>         | mm <sup>2</sup> | in               | mm   | lbs/ft | kg/m  | lbs    | kgf    |                  | Wood (m)                           | Steel (m) |
| 24              | SX-32/45/472 | 41                                        | 0.1235                  | 79.67           | 0.472            | 12.0 | 0.281  | 0.418 | 14947  | 6780   | 1-1461           | 7000                               | 7000      |
| 36              | SX-41/32/472 | 41                                        | 0.1186                  | 76.53           | 0.472            | 12.0 | 0.247  | 0.368 | 12122  | 5498   | 1-350            | 7000                               | 7000      |
| 24              | SX-75/37/555 | 96                                        | 0.1757                  | 113.37          | 0.555            | 14.1 | 0.317  | 0.471 | 15392  | 6982   | 1-1438           | 7000                               | 7000      |
| 24              | SX-90/30/575 | 116                                       | 0.1889                  | 121.86          | 0.575            | 14.6 | 0.313  | 0.466 | 14464  | 6561   | 1-430            | 7000                               | 7000      |
| 96              | S1-82/52/630 | 137                                       | 0.2131                  | 137.45          | 0.630            | 16.0 | 0.417  | 0.621 | 20,042 | 9,091  | 1-1170           | 5800                               | 7000      |
| 96              | S1-83/59/647 | 152                                       | 0.2265                  | 146.13          | 0.647            | 16.4 | 0.453  | 0.674 | 22,131 | 10,039 | 1-917            | 5300                               | 7000      |
| 96              | S1-91/61/668 | 177                                       | 0.2429                  | 156.69          | 0.668            | 17.0 | 0.479  | 0.712 | 23,302 | 10,570 | 1-917            | 5100                               | 6450      |
| 144             | S1-71/52/630 | 118                                       | 0.2006                  | 129.41          | 0.630            | 16.0 | 0.410  | 0.610 | 19,791 | 8,977  | 1-1440           | 5950                               | 7000      |
| 144             | S1-73/59/647 | 132                                       | 0.2140                  | 138.09          | 0.647            | 16.4 | 0.452  | 0.673 | 21,880 | 9,925  | 1-350            | 5400                               | 6850      |
| 144             | S1-81/61/668 | 155                                       | 0.2304                  | 148.65          | 0.668            | 17.0 | 0.472  | 0.702 | 23,051 | 10,456 | 1-1440           | 5150                               | 6450      |
| 216             | S1-61/52/630 | 100                                       | 0.1881                  | 121.37          | 0.630            | 16.0 | 0.416  | 0.619 | 19,540 | 8,863  | 1-536            | 5850                               | 7000      |
| 216             | S1-63/59/647 | 114                                       | 0.2016                  | 130.05          | 0.647            | 16.4 | 0.451  | 0.672 | 21,630 | 9,811  | 1-420            | 5400                               | 6850      |
| 216             | S1-71/61/668 | 135                                       | 0.2179                  | 140.60          | 0.668            | 17.0 | 0.477  | 0.710 | 22,801 | 10,342 | 1-536            | 5100                               | 6450      |
| 288             | S1-41/52/630 | 68                                        | 0.1632                  | 105.28          | 0.630            | 16.0 | 0.414  | 0.616 | 19,038 | 8,636  | 1-1461           | 5890                               | 7000      |
| 288             | S1-42/59/647 | 79                                        | 0.1766                  | 113.96          | 0.647            | 16.4 | 0.450  | 0.670 | 21,128 | 9,584  | 1-1461           | 5400                               | 6850      |
| 288             | S1-50/61/668 | 97                                        | 0.1930                  | 124.52          | 0.668            | 17.0 | 0.476  | 0.708 | 22,299 | 10,115 | 1-1461           | 5125                               | 6450      |

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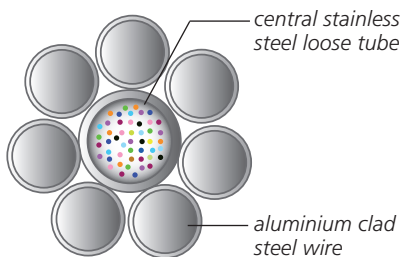


### Metallic Aerial Self Supporting Cable

Metallic Aerial Self-Supporting (MASS) Cable is an alternative solution used for installing optical cable on medium and high voltage power lines. It is typically used when existing phase or ground wire replacement is not possible or economical. MASS cable is a compact, light-weight solution with no electrical function, designed to provide a telecommunications path without interfering with the existing power lines or infrastructure. Its small size help minimize loading on towers and poles yet it is completely self-supporting to meet sag and tension requirements. It is typically installed in "under build" applications beneath the live phases.

#### Features:

- Central Stainless Steel loose tube design
- Typical diameter between 9 – 12 mm (0.35" – 0.47")
- Fiber counts up to 72
- No voltage limit – suitable for medium & high voltage lines
- Suitable for use on lines without a ground wire
- Convenient means to add fiber where OPGW is already installed
- Deployed in regions with high lightning activity
- Can be installed without an outage
- Small cable size limits additional structural loading
- Wind loading properties similar to standard conductors
- Suitable for wooden poles with universal attachment
- Aluminum Clad, Aluminum Alloy or Galvanized Steel wire options available depending on mechanical properties required



#### Specifications:

| FIBERS<br>(max) | TYPICAL SIZE | OVERALL DIAMETER |      | WEIGHT |       | RBS    |       | STAINLESS STEEL TUBE ID / OD |             | WIRE DIAMETER |      |
|-----------------|--------------|------------------|------|--------|-------|--------|-------|------------------------------|-------------|---------------|------|
|                 |              | in               | mm   | lbs/ft | kg/m  | lbs    | Kg    | in                           | mm          | in            | mm   |
| 24              | ACS 28       | 0.30             | 7.5  | 1.50   | 0.207 | 7,958  | 3,610 | 0.10 / 0.11                  | 2.6 / 3.0   | 0.09          | 2.25 |
| 24              | ACS 42       | 0.35             | 9.0  | 2.19   | 0.303 | 12,140 | 5,506 | 0.10 / 0.11                  | 2.6 / 3.0   | 0.11          | 3.0  |
| 30              | ACS 34       | 0.33             | 8.3  | 1.83   | 0.253 | 9,824  | 4,456 | 0.11 / 0.13                  | 2.9 / 3.3   | 0.09          | 2.5  |
| 30              | ACS 50       | 0.39             | 9.8  | 2.57   | 0.355 | 14,253 | 6,465 | 0.11 / 0.13                  | 2.85 / 3.25 | 0.13          | 3.25 |
| 36              | ACS 37       | 0.34             | 8.6  | 1.99   | 0.275 | 10,633 | 4,823 | 0.11 / 0.13                  | 2.9 / 3.4   | 0.10          | 2.6  |
| 36              | ACS 58       | 0.41             | 10.5 | 2.99   | 0.414 | 15,647 | 7,097 | 0.11 / 0.14                  | 3.0 / 3.5   | 0.14          | 3.5  |
| 48              | ACS 40       | 0.35             | 9.0  | 2.15   | 0.298 | 11,465 | 5,201 | 0.12 / 0.14                  | 3.1 / 3.6   | 0.10          | 2.7  |
| 48              | ACS 61       | 0.43             | 10.8 | 3.17   | 0.438 | 16,568 | 7,515 | 0.12 / 0.14                  | 3.1 / 3.6   | 0.14          | 3.6  |
| 60              | ACS 45       | 0.37             | 9.5  | 2.39   | 0.331 | 12,769 | 5,792 | 0.13 / 0.15                  | 3.3 / 3.8   | 0.11          | 2.85 |
| 60              | ACS 66       | 0.44             | 11.3 | 3.43   | 0.475 | 17,692 | 8,025 | 0.13 / 0.15                  | 3.3 / 3.8   | 0.14          | 3.75 |
| 72              | ACS 49       | 0.39             | 10.0 | 2.67   | 0.369 | 14,163 | 6,424 | 0.13 / 0.15                  | 3.4 / 4.0   | 0.11          | 3.0  |
| 72              | ACS 75       | 0.47             | 12.0 | 3.92   | 0.542 | 19,491 | 8,841 | 0.13 / 0.15                  | 3.4 / 4.0   | 0.16          | 4.0  |

ACS - Aluminum Clad Steel wire.

Wire is available in ACS and Aluminum Alloy. Both are available in a variety of grades, please ask for details.

MASS cables are designed to customer specification.

**NOTE:** The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.



### Optical Phase Conductor

Optical Phase Conductor (OPPC) is used as an alternative telecommunications solution when there is no existing ground wire, meaning Optical Ground Wire (OPGW) is not a viable option. The basic construction is similar to conventional OPGW, only it is designed to simulate the mechanical and electrical characteristics of the phase wire it replaces. Unlike OPGW, where the cable is not carrying continuous current, OPPC is energized along high voltage power lines. Therefore it requires specially adapted splice boxes and insulators to accommodate the live line conditions.

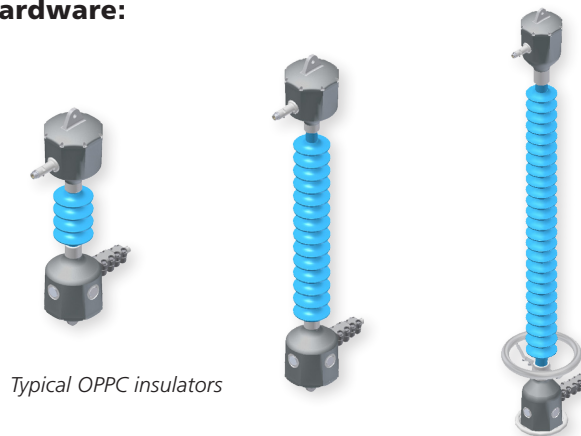
AFL can design a cable to accommodate your precise application. To do so, we need the properties of the phase conductor you are seeking to replace. With that, we can do the rest.

#### Features:

- Engineered to match existing conductors
- Available in fiber counts up to 144
- Distribution or Transmission – from 36 to 245 kV
- Suitable for any type of optical fiber, single-mode or multimode
- Designed to match electrical properties of conductor it replaces
- Uses standard fiber optic deadends and suspension grips
- Full range of hardware options available



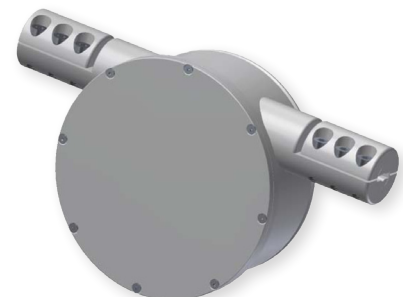
#### OPPC Hardware:



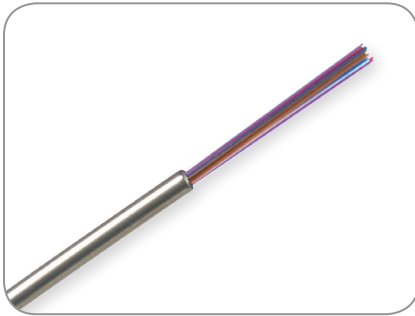
*Typical OPPC insulators*



*OPPC joint box - Cast Aluminium*



*OPPC joint box - Self Supporting*



### Stainless Steel Fiber Optic Tubes

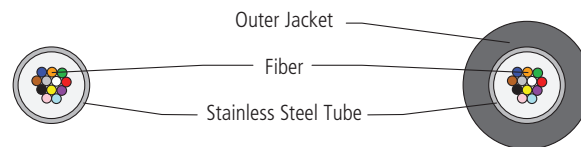
As the inventor and owner of the technology for placing optical fibers into stainless steel tubes, AFL offers a range of tube sizes and fiber counts for a variety of applications. Each tube is flooded with a thixotropic filling compound and hermetically sealed to protect the enclosed fibers from environmental degradation. This product is sometimes referred to as FIST (Fiber in Steel Tube) or FIMT (Fiber in Metal Tube).

#### Jacket Options

AFL can encapsulate any of our stainless steel tubes with any of the following polymers:

- Hytrel™
- Santoprene™
- Polyethylene
- Polypropylene
- Nylon
- PVDF

#### Cable Components



#### Applications

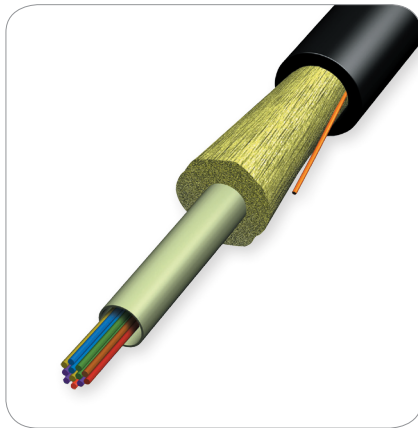
- Umbilical Cables
- Downhole Cables for Oil & Gas
- Towed Arrays
- High Temperature Cables
- Hybrid Cables
- Sensor Cables
- OPGW

#### Specifications (without jacketing)

| OPTION NUMBER | MAXIMUM FIBER COUNT | OUTSIDE DIAMETER INCHES (MM) | INSIDE DIAMETER INCHES (MM) | WALL THICKNESS INCHES (MM) |
|---------------|---------------------|------------------------------|-----------------------------|----------------------------|
| 1             | 3                   | 0.046 (1.17)                 | 0.036 (0.91)                | 0.005 (0.127)              |
| 2             | 4                   | 0.052 (1.32)                 | 0.042 (1.07)                | 0.005 (0.127)              |
| 3             | 6                   | 0.071 (1.80)                 | 0.055 (1.40)                | 0.008 (0.200)              |
| 4             | 8                   | 0.074 (1.88)                 | 0.058 (1.47)                | 0.008 (0.200)              |
| 5             | 8                   | 0.078 (1.98)                 | 0.062 (1.57)                | 0.008 (0.200)              |
| 6             | 8                   | 0.079 (2.01)                 | 0.063 (1.60)                | 0.008 (0.200)              |
| 7             | 8                   | 0.082 (2.08)                 | 0.076 (1.68)                | 0.008 (0.200)              |
| 8             | 12                  | 0.092 (2.34)                 | 0.076 (1.93)                | 0.008 (0.200)              |
| 9             | 16                  | 0.094 (2.39)                 | 0.078 (1.98)                | 0.008 (0.200)              |
| 10            | 16                  | 0.098 (2.49)                 | 0.082 (2.08)                | 0.008 (0.200)              |
| 11            | 16                  | 0.106 (2.69)                 | 0.090 (2.29)                | 0.008 (0.200)              |
| 12            | 24                  | 0.118 (3.00)                 | 0.102 (2.59)                | 0.008 (0.200)              |
| 13            | 36                  | 0.125 (3.18)                 | 0.109 (2.77)                | 0.008 (0.200)              |
| 14            | 48                  | 0.134 (3.40)                 | 0.119 (3.02)                | 0.008 (0.200)              |
| 15            | 60                  | 0.142 (3.61)                 | 0.126 (3.20)                | 0.008 (0.200)              |
| 16            | 72                  | 0.150 (3.81)                 | 0.134 (3.40)                | 0.008 (0.200)              |
| 17            | 72                  | 0.156 (3.96)                 | 0.140 (3.56)                | 0.008 (0.200)              |

Available in Stainless Steel 304, 316 and Incolony 825. Others sizes and materials available on request.

For specifications or questions regarding these products please contact Brian Herbst 864-433-5361 or email [Brian.Herst@AFLglobal.com](mailto:Brian.Herst@AFLglobal.com).



### Aerial Drop Cable

Aerial Drop Cable is specifically designed for Fiber-to-the-Subscriber applications. It is a round, all dielectric cable ideally suited for self-supporting drop-type installations as well as in lashed or conduit builds.

#### 6-Fiber Design

Typical Spans with 2.0% Installation Sag:

- NESC Heavy 150 ft (46 meters)
- NESC Medium 275 ft (84 meters)
- NESC Light 550 ft (168 meters)

#### Temperature Range

Operating - 40°C to + 70°C

Storage - 50°C to + 70°C

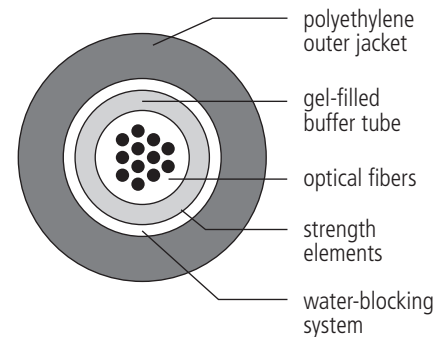
Installation - 30°C to + 70°C

#### 12-Fiber Design

Typical Spans with 1.5% Installation Sag:

- NESC Heavy 220 ft (67 meters)
- NESC Medium 400 ft (122 meters)
- NESC Light 675 ft (206 meters)

#### Cable Components



#### Features

- Designed for use with inexpensive attachment hardware
- Compatible with standard splice closures
- Self-supporting - no messenger needed
- Small cross section for maximum density in closures and conduit

#### Mechanical Data

| FIBER COUNT | NOMINAL DIAMETER |     | NOMINAL WEIGHT |       | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|-----|----------------|-------|------------------|--------|-----------|--------|
|             |                  |     |                |       | SINGLE-MODE      |        | MULTIMODE |        |
|             | INCHES           | MM  | LBS/1000'      | KG/KM | FEET             | METERS | FEET      | METERS |
| 1 - 6       | .256             | 6.5 | 23             | 34    | 32,800           | 10,000 | 26,250    | 8,000  |
| 7 - 12      | .307             | 7.8 | 34             | 50    | 27,500           | 8,400  | 26,250    | 8,000  |

\* Longer lengths may be available upon request.

#### Installation Information

| FIBER COUNT | MAXIMUM LOADING OPERATING TENSION |      | MINIMUM BENDING RADIUS (DYNAMIC) |    | MINIMUM BENDING RADIUS (STATIC) |     |
|-------------|-----------------------------------|------|----------------------------------|----|---------------------------------|-----|
|             | LBS                               | N    | INCHES                           | CM | INCHES                          | CM  |
| 1 - 6       | 361                               | 1606 | 5                                | 13 | 2.5                             | 6.5 |
| 7 - 12      | 589                               | 2621 | 6                                | 16 | 3                               | 8   |

NOTE: AFL Recommends coiling a minimum of 12 feet (3.6 meters) into 6 inch (0.15meters) loops at the entrance to all splice closures.

#### Ordering Information

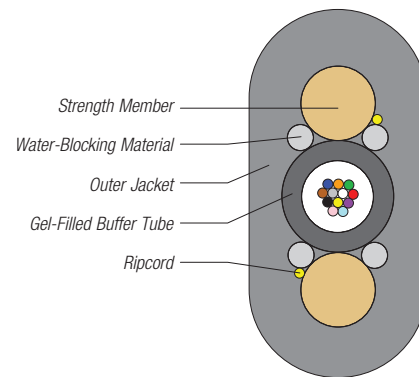
| FIBER COUNT | FIBER TYPE              | AFL NO.       | MAXIMUM ATTENUATION (DB/KM) |        |        | BANDWIDTH (MHZ•KM) |        |
|-------------|-------------------------|---------------|-----------------------------|--------|--------|--------------------|--------|
|             |                         |               | 850NM                       | 1300NM | 1550NM | 850NM              | 1300NM |
| 1 - 6       | 62.5/125 Giga-Link™ 300 | AE00666110AA9 | 3.5                         | 1.2    | N/A    | 200                | 600    |
| 7 - 12      |                         | AE0126C110AC1 |                             |        |        |                    |        |
| 1 - 6       | 50/125 Giga-Link™ 600   | AE00656110AA9 | 3.5                         | 1.2    | N/A    | 500                | 500    |
| 7 - 12      |                         | AE0125C110AC1 |                             |        |        |                    |        |
| 1 - 6       | Single-mode             | AE00696110AA9 | N/A                         | 0.4    | 0.3    | N/A                | N/A    |
| 7 - 12      |                         | AE0129C110AC1 |                             |        |        |                    |        |



### Flat Drop Cable

Designed for quick installation and ease in handling, AFL Flat-Span Drop Cable serves as the last link for the FTTx networks of today. The design is constructed utilizing proven buffer tube technology with a single tube containing up to twelve fibers. Two diametrically opposed dielectric rods are placed alongside the buffer tube to provide the mechanical properties of the cable. The finished product, with its compact flat profile, acts as a self-supporting aerial solution for those last mile drops to the customer's home or office.

#### Cable Components



#### Typical Lengths

| REEL SIZE | MAXIMUM LENGTHS<br>(Single-mode) |        |
|-----------|----------------------------------|--------|
|           | FEET                             | METERS |
| 30" x 12" | 4300                             | 1300   |
| 24" x 12" | 2600                             | 800    |

#### Fiber Information

| FIBER TYPE  | MAXIMUM ATTENUATION<br>(dB/km) |        |
|-------------|--------------------------------|--------|
|             | 1310nm                         | 1550nm |
| Single-mode | 0.40                           | 0.30   |

#### Mechanical Data

| PARAMETER                      | U.S.        | METRIC          |
|--------------------------------|-------------|-----------------|
| Fiber Count (max.)             | 12          | 12              |
| Cable Dimensions:              | .20" x .33" | 5.0 mm x 8.5 mm |
| Linear Weight:                 | .026 lbs/ft | 39 kg/km        |
| Installation Load              | 300 lbs     | 1,336 N         |
| Bend Radius, installation      | 5.9"        | 15 cm           |
| Bend Radius, post-installation | 3.9"        | 10 cm           |

#### Operational/Installation Data

| PARAMETER                            | VALUE          |        |       |
|--------------------------------------|----------------|--------|-------|
| Operation / Installation Temperature | -40°C to +70°C |        |       |
| Storage Temperature                  | -40°C to +75°C |        |       |
| Loading                              | NESC           |        |       |
|                                      | Light          | Medium | Heavy |
| Maximum Span Lengths (ft)            | 400            | 250    | 150   |
| Maximum Span Lengths (meters)        | 122            | 76     | 46    |
| Minimum Installation Sag (% of span) | 1%             | 1%     | 1%    |

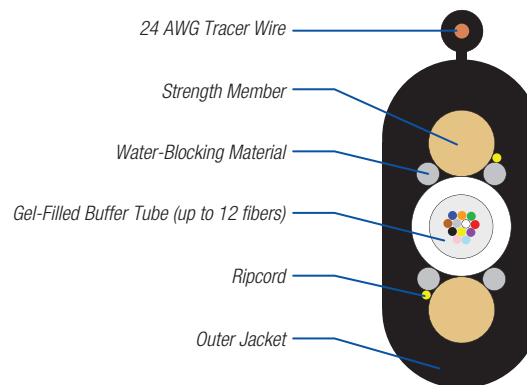
Note: Larger spans can be achieved if necessary with installation sags larger than 1% of span.



### Toneable Flat Drop Cable for Duct Applications

Designed for quick installation and ease in handling, AFL Toneable Flat Drop Cable serves as the last link for the FTTx networks of today. The design is constructed utilizing proven buffer tube technology with a single tube containing up to twelve fibers. Two diametrically opposed dielectric rods are placed alongside the buffer tube to provide the mechanical properties of the cable. A copper wire is attached to the cable for toning purposes. No bonding or grounding of the main cable is required.

#### Cable Components



#### Typical Lengths

| REEL SIZE | MAXIMUM LENGTHS<br>(Single-mode) |        |
|-----------|----------------------------------|--------|
|           | FEET                             | METERS |
| 30" x 12" | 3000                             | 925    |
| 24" x 12" | 1800                             | 550    |

#### Fiber Information

| FIBER TYPE  | MAXIMUM ATTENUATION<br>(dB/km) |        |
|-------------|--------------------------------|--------|
|             | 1310nm                         | 1550nm |
| Single-mode | 0.40                           | 0.30   |

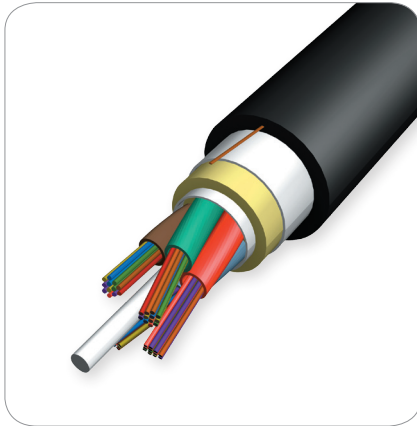
#### Mechanical Data

| PARAMETER                      | U.S.        | METRIC            |
|--------------------------------|-------------|-------------------|
| Fiber Count (max.)             | 12          | 12                |
| Cable Dimensions:              | .20" x .44" | 5.0 mm x 11.25 mm |
| Linear Weight:                 | .028 lbs/ft | 42 kg/km          |
| Installation Load              | 300 lbs     | 1,336 N           |
| Bend Radius, installation      | 5.9"        | 15 cm             |
| Bend Radius, post-installation | 3.9"        | 10 cm             |

#### Operational/Installation Data

| PARAMETER                            | VALUE          |
|--------------------------------------|----------------|
| Operation / Installation Temperature | -40°C to +70°C |
| Storage Temperature                  | -40°C to +75°C |

Note: Larger spans can be achieved if necessary with installation sags larger than 1% of span.



## Mini-Span® ADSS Cable

AFL Mini-Span All-Dielectric Self-Supporting (ADSS) cable is designed for outside plant aerial and duct applications in local and campus network loop architectures. From pole-to-build to town-town installations, the Mini-Span cabling system, which includes cables, suspension, dead end and termination enclosures, offers a comprehensive transmission circuit infrastructure with proven, high-reliability performance. As the ADSS cabling concept implies, a separate messenger support wire hanging system is not required, greatly reducing installation time and improving upfront and maintenance labor costs.

Mini-Span includes fiber counts up to 144 optical fibers and any type or combination of single-mode and laser-optimized multimode fibers with the cable. Pole-to-Pole span lengths range from 50 feet to over 1000 feet. Custom ADSS design options allow span lengths of over one mile (5,280 feet).

### Mechanical Data

| CABLE         | FIBER COUNT | NOMINAL DIAMETER |      | NOMINAL WEIGHT |       | MAXIMUM LENGTHS* |        |           |        |
|---------------|-------------|------------------|------|----------------|-------|------------------|--------|-----------|--------|
|               |             | INCHES           | MM   | LBS/1000'      | KG/KM | SINGLE-MODE      |        | MULTIMODE |        |
|               |             |                  |      |                |       | FEET             | METERS | FEET      | METERS |
| Mini-Span 323 | 2-24        | 0.323            | 8.2  | 35             | 53    | 32,800           | 10,000 | 26,250    | 8,000  |
| Mini-Span 383 | 2-48        | 0.383            | 9.7  | 49             | 72    | 32,800           | 10,000 | 26,250    | 8,000  |
| Mini-Span 424 | 2-60        | 0.424            | 10.8 | 57             | 84    | 32,800           | 10,000 | 26,250    | 8,000  |
| Mini-Span 484 | 2-90        | 0.484            | 12.3 | 77             | 115   | 32,800           | 10,000 | 26,250    | 8,000  |
| Mini-Span 535 | 2-96        | 0.535            | 13.6 | 100            | 148   | 32,800           | 10,000 | 26,250    | 8,000  |
| Mini-Span 693 | 2-144       | 0.693            | 17.6 | 151            | 224   | 23,000           | 7,000  | 23,000    | 7,000  |

\* Longer lengths may be available upon request.

### Installation Information

| CABLE         | NESC SPANS (@ 1% INITIAL SAG)<br>FEET (METERS) |           |           | MAX. SAGGING TENSION |       | MAX. LOADING<br>OPERATING TENSION |       | MIN. BENDING<br>RADIUS (DYNAMIC) |    | MIN. BENDING<br>RADIUS (STATIC) |     |
|---------------|------------------------------------------------|-----------|-----------|----------------------|-------|-----------------------------------|-------|----------------------------------|----|---------------------------------|-----|
|               | LIGHT                                          | MEDIUM    | HEAVY     | LBS                  | N     | LBS                               | N     | INCHES                           | CM | INCHES                          | CM  |
| Mini-Span 323 | 500 (152)                                      | 300 (91)  | 175 (53)  | 147                  | 654   | 374                               | 1668  | 7                                | 17 | 3.5                             | 8.5 |
| Mini-Span 383 | 450 (137)                                      | 300 (91)  | 180 (55)  | 183                  | 814   | 402                               | 1,785 | 8                                | 20 | 4                               | 10  |
| Mini-Span 424 | 600 (183)                                      | 450 (137) | 275 (84)  | 424                  | 1886  | 707                               | 3145  | 9                                | 22 | 4                               | 11  |
| Mini-Span 484 | 525 (160)                                      | 400 (122) | 275 (84)  | 531                  | 2363  | 840                               | 3738  | 10                               | 25 | 5                               | 13  |
| Mini-Span 535 | 1050 (320)                                     | 850 (259) | 575 (175) | 1,306                | 5,809 | 1,783                             | 7,936 | 13                               | 27 | 5                               | 14  |
| Mini-Span 693 | 750 (229)                                      | 600 (183) | 500 (152) | 1,411                | 6,278 | 1,856                             | 8,260 | 14                               | 36 | 7                               | 18  |

### Optical Information

| CABLE         | MAXIMUM ATTENUATION (db/km)    |                                            |                                         | BANDWIDTH (MHz•km)             |                                            |                                         |
|---------------|--------------------------------|--------------------------------------------|-----------------------------------------|--------------------------------|--------------------------------------------|-----------------------------------------|
|               | SINGLE-MODE<br>(1310nm/1550nm) | MULTIMODE<br>*62.5/125µm<br>(850nm/1300nm) | MULTIMODE<br>50/125µm<br>(850nm/1300nm) | SINGLE-MODE<br>(1310nm/1550nm) | MULTIMODE<br>*62.5/125µm<br>(850nm/1300nm) | MULTIMODE<br>50/125µm<br>(850nm/1300nm) |
| Mini-Span 323 | 0.40/0.30                      | 3.5/1.2                                    | 3.5/1.2                                 | n/a                            | 200/600                                    | 500/500                                 |
| Mini-Span 383 | 0.35/0.25                      | 3.5/1.2                                    | 2.9/0.9                                 |                                |                                            |                                         |
| Mini-Span 424 |                                |                                            |                                         |                                |                                            |                                         |
| Mini-Span 484 |                                |                                            |                                         |                                |                                            |                                         |
| Mini-Span 535 |                                |                                            |                                         |                                |                                            |                                         |
| Mini-Span 693 |                                |                                            |                                         |                                |                                            |                                         |

\* All 62.5/125 µm multimode ADSS cable transmission performances meet or exceed FDDI requirements.  
Premium transmission performance fibers available on request.

## Mini-Span® ADSS Cable

### Ordering Information

| CABLE         | FIBER COUNT | FIBERS PER TUBE | NUMBER OF TUBES / FIBERS    | AFL NO.       |                    |                  |
|---------------|-------------|-----------------|-----------------------------|---------------|--------------------|------------------|
|               |             |                 |                             | SINGLE-MODE   | MULTIMODE 62.5/125 | MULTIMODE 50/125 |
| Mini-Span 323 | 6           | 6               | 1 w/6                       | AE00696420AA1 | AE00666420AA1      | AE00656420AA1    |
|               | 12          | 6               | 2 w/6                       | AE01296420AA1 | AE01266420AA1      | AE01256420AA1    |
|               | 18          | 6               | 3 w/6                       | AE01896420AA1 | AE01866420AA1      | AE01856420AA1    |
|               | 24          | 6               | 4 w/6                       | AE02496420AA1 | AE02466420AA1      | AE02456420AA1    |
| Mini-Span 383 | 6           | 6               | 1 w/6 (3 fillers)           | AE0069C420AA0 | AE0066C420AA0      | AE0065C420AA0    |
|               | 12          | 12              | 1 w/12 (3 fillers)          | AE0129C420AA0 | AE0126C420AA0      | AE0125C420AA0    |
|               | 18          | 12              | 1 w/12, 1 w/6 (2 fillers)   | AE0189C420AA0 | AE0186C420AA0      | AE0185C420AA0    |
|               | 24          | 12              | 2 w/12 (2 fillers)          | AE0249C420AA0 | AE0246C420AA0      | AE0245C420AA0    |
|               | 30          | 12              | 2 w/12, 1 w/6 (1 filler)    | AE0309C420AA0 | AE0306C420AA0      | AE0305C420AA0    |
|               | 36          | 12              | 3 w/12 (1 filler)           | AE0369C420AA0 | AE0366C420AA0      | AE0365C420AA0    |
|               | 48          | 12              | 4 w/12                      | AE0489C420AA0 | AE0486C420AA0      | AE0485C420AA0    |
| Mini-Span 424 | 6           | 6               | 1 w/6 (4 fillers)           | AE0069C520AA4 | AE0066C520AA4      | AE0065C520AA4    |
|               | 12          | 12              | 1 w/12 (4 fillers)          | AE0129C520AA4 | AE0126C520AA4      | AE0125C520AA4    |
|               | 18          | 12              | 1 w/12, 1 w/6 (3 fillers)   | AE0189C520AA4 | AE0186C520AA4      | AE0185C520AA4    |
|               | 24          | 12              | 2 w/12 (3 fillers)          | AE0249C520AA4 | AE0246C520AA4      | AE0245C520AA4    |
|               | 30          | 12              | 2 w/12, 1 w/6 (2 fillers)   | AE0309C520AA4 | AE0306C520AA4      | AE0305C520AA4    |
|               | 36          | 12              | 3 w/12 (2 fillers)          | AE0369C520AA4 | AE0366C520AA4      | AE0365C520AA4    |
|               | 48          | 12              | 4 w/12 (1 filler)           | AE0489C520AA4 | AE0486C520AA4      | AE0485C520AA4    |
|               | 60          | 12              | 5 w/12 (no fillers)         | AE0609C520AA4 | AE0606C520AA4      | AE0605C520AA4    |
| Mini-Span 484 | 6           | 6               | 1 w/6 (4 fillers)           | AE0069I520EA1 | AE0066I520EA1      | AE0065I520EA1    |
|               | 12          | 12              | 1 w/12 (4 fillers)          | AE0129I520EA1 | AE0126I520EA1      | AE0125I520EA1    |
|               | 18          | 12              | 1 w/12, 1 w/6 (3 fillers)   | AE0189I520EA1 | AE0186I520EA1      | AE0185I520EA1    |
|               | 24          | 12              | 2 w/12 (3 fillers)          | AE0249I520EA1 | AE0246I520EA1      | AE0245I520EA1    |
|               | 30          | 12              | 2 w/12, 1 w/6 (2 fillers)   | AE0309I520EA1 | AE0306I520EA1      | AE0305I520EA1    |
|               | 36          | 12              | 3 w/12 (2 fillers)          | AE0369I520EA1 | AE0366I520EA1      | AE0365I520EA1    |
|               | 48          | 12              | 4 w/12 (1 filler)           | AE0489I520EA1 | AE0486I520EA1      | AE0485I520EA1    |
|               | 60          | 12              | 5 w/12 (no fillers)         | AE0609I520EA1 | AE0606I520EA1      | AE0605I520EA1    |
|               | 72          | 18              | 4 w/18 (1 filler)           | AE0729I520EA1 | AE0726I520EA1      | AE0725I520EA1    |
|               | 84          | 18              | 4 w/18, 1 w/12 (no fillers) | AE0849I520EA1 | AE0846I520EA1      | AE0845I520EA1    |
| Mini-Span 535 | 6           | 6               | 1 w/6 (7 fillers)           | AE0069C820EA7 | AE0066C820EA7      | AE0065C820EA7    |
|               | 12          | 12              | 1 w/12 (7 fillers)          | AE0129C820EA7 | AE0126C820EA7      | AE0125C820EA7    |
|               | 18          | 12              | 1 w/12, 1 w/6 (6 fillers)   | AE0189C820EA7 | AE0186C820EA7      | AE0185C820EA7    |
|               | 24          | 12              | 2 w/12 (6 fillers)          | AE0249C820EA7 | AE0246C820EA7      | AE0245C820EA7    |
|               | 30          | 12              | 2 w/12, 1 w/6 (5 fillers)   | AE0309C820EA7 | AE0306C820EA7      | AE0305C820EA7    |
|               | 36          | 12              | 3 w/12 (5 fillers)          | AE0369C820EA7 | AE0366C820EA7      | AE0365C820EA7    |
|               | 48          | 12              | 4 w/12 (4 fillers)          | AE0489C820EA7 | AE0486C820EA7      | AE0485C820EA7    |
|               | 60          | 12              | 5 w/12 (3 fillers)          | AE0609C820EA7 | AE0606C820EA7      | AE0605C820EA7    |
|               | 72          | 12              | 6 w/12 (2 fillers)          | AE0729C820EA7 | AE0726C820EA7      | AE0725C820EA7    |
|               | 84          | 12              | 7 w/12 (1 filler)           | AE0849C820EA7 | AE0846C820EA7      | AE0845C820EA7    |
| Mini-Span 693 | 96          | 12              | 8 w/12 (no fillers)         | AE0969C820EA7 | AE0966C820EA7      | AE0965C820EA7    |
|               | 12          | 12              | 1 w/12 (11 fillers)         | AE0129CC20EA0 | AE0126CC20EA0      | AE0125CC20EA0    |
|               | 24          | 12              | 2 w/12 (10 fillers)         | AE0249CC20EA0 | AE0246CC20EA0      | AE0245CC20EA0    |
|               | 36          | 12              | 3 w/12 (9 fillers)          | AE0369CC20EA0 | AE0366CC20EA0      | AE0365CC20EA0    |
|               | 48          | 12              | 4 w/12 (8 fillers)          | AE0489CC20EA0 | AE0486CC20EA0      | AE0485CC20EA0    |
|               | 60          | 12              | 5 w/12 (7 fillers)          | AE0609CC20EA0 | AE0606CC20EA0      | AE0605CC20EA0    |
|               | 72          | 12              | 6 w/12 (6 fillers)          | AE0729CC20EA0 | AE0726CC20EA0      | AE0725CC20EA0    |
|               | 84          | 12              | 7 w/12 (5 fillers)          | AE0849CC20EA0 | AE0846CC20EA0      | AE0845CC20EA0    |
|               | 96          | 12              | 8 w/12 (4 fillers)          | AE0969CC20EA0 | AE0966CC20EA0      | AE0965CC20EA0    |
|               | 108         | 12              | 9 w/12 (3 fillers)          | AE1089CC20EA0 | AE1086CC20EA0      | AE1085CC20EA0    |
|               | 120         | 12              | 10 w/12 (2 fillers)         | AE1209CC20EA0 | AE1206CC20EA0      | AE1205CC20EA0    |
|               | 132         | 12              | 11 w/12 (1 filler)          | AE1329CC20EA0 | AE1326CC20EA0      | AE1325CC20EA0    |
|               | 144         | 12              | 12 w/12 (no fillers)        | AE1449CC20EA0 | AE1446CC20EA0      | AE1445CC20EA0    |

Contact customer service for price and availability. Non-zero dispersion-shifted fibers are also available.

## Mini-Span® ADSS Cable

### Sag and Tension Information

| CABLE         | SPAN |        | INITIAL<br>SAG | INITIAL<br>TENSION |     | NESC LIGHT LOADING |     |         | NESC MEDIUM LOADING |     |         | NESC HEAVY LOADING |     |         |
|---------------|------|--------|----------------|--------------------|-----|--------------------|-----|---------|---------------------|-----|---------|--------------------|-----|---------|
|               |      |        |                |                    |     | SAG                |     | TENSION | SAG                 |     | TENSION | SAG                |     | TENSION |
|               | FEET | METERS | %              | LBS                | N   | %                  | LBS |         | %                   | LBS |         | %                  | LBS |         |
| MINI-SPAN 323 | 50   | 15     | 1.5            | 15                 | 67  | 0.4                | 66  | 294     | 2.1                 | 101 | 449     | 3.2                | 152 | 677     |
|               | 75   | 23     | 1.5            | 22                 | 98  | 0.5                | 90  | 339     | 2.3                 | 135 | 602     | 3.6                | 202 | 901     |
|               | 100  | 30     | 1.5            | 30                 | 133 | 0.5                | 111 | 494     | 2.5                 | 166 | 741     | 3.9                | 248 | 1,102   |
|               | 125  | 38     | 1.5            | 37                 | 165 | 0.5                | 131 | 583     | 2.7                 | 195 | 867     | 4.2                | 289 | 1,288   |
|               | 150  | 46     | 1.5            | 44                 | 196 | 0.5                | 150 | 667     | 2.8                 | 222 | 989     | 4.5                | 329 | 1,463   |
|               | 175  | 53     | 1.5            | 52                 | 232 | 0.6                | 168 | 748     | 3.0                 | 248 | 1,104   | 4.7                | 366 | 1,629   |
|               | 200  | 61     | 1.5            | 59                 | 262 | 0.6                | 185 | 825     | 3.1                 | 273 | 1,214   | —                  | —   | —       |
|               | 225  | 69     | 1.5            | 66                 | 294 | 0.6                | 202 | 900     | 3.2                 | 297 | 1,321   | —                  | —   | —       |
|               | 250  | 76     | 1.5            | 74                 | 329 | 0.6                | 219 | 973     | 3.3                 | 320 | 1,424   | —                  | —   | —       |
|               | 275  | 84     | 1.5            | 81                 | 360 | 0.6                | 235 | 1,044   | 3.4                 | 342 | 1,524   | —                  | —   | —       |
|               | 300  | 91     | 1.5            | 88                 | 392 | 0.6                | 250 | 1,113   | 3.5                 | 364 | 1,621   | —                  | —   | —       |
|               | 325  | 99     | 1.5            | 96                 | 427 | 0.7                | 265 | 1,181   | —                   | —   | —       | —                  | —   | —       |
|               | 350  | 107    | 1.5            | 103                | 458 | 0.7                | 280 | 1,247   | —                   | —   | —       | —                  | —   | —       |
|               | 375  | 114    | 1.5            | 111                | 494 | 0.7                | 295 | 1,312   | —                   | —   | —       | —                  | —   | —       |
|               | 400  | 122    | 1.5            | 118                | 525 | 0.7                | 309 | 1,376   | —                   | —   | —       | —                  | —   | —       |
|               | 425  | 130    | 1.5            | 125                | 556 | 0.7                | 324 | 1,440   | —                   | —   | —       | —                  | —   | —       |
|               | 450  | 137    | 1.5            | 133                | 592 | 0.7                | 338 | 1,502   | —                   | —   | —       | —                  | —   | —       |
| MINI-SPAN 383 | 50   | 15     | 1.5            | 20                 | 89  | 0.5                | 76  | 337     | 2.2                 | 108 | 482     | 3.2                | 161 | 717     |
|               | 75   | 23     | 1.5            | 30                 | 133 | 0.5                | 103 | 457     | 2.4                 | 146 | 648     | 3.6                | 215 | 956     |
|               | 100  | 30     | 1.5            | 41                 | 182 | 0.6                | 128 | 568     | 2.6                 | 179 | 798     | 4.0                | 263 | 1,171   |
|               | 125  | 38     | 1.5            | 51                 | 227 | 0.6                | 151 | 671     | 2.8                 | 211 | 938     | 4.2                | 308 | 1,370   |
|               | 150  | 46     | 1.5            | 61                 | 271 | 0.6                | 173 | 768     | 2.9                 | 240 | 1,070   | 4.5                | 350 | 1,558   |
|               | 175  | 53     | 1.5            | 71                 | 316 | 0.6                | 194 | 862     | 3.0                 | 269 | 1,196   | 4.7                | 390 | 1,736   |
|               | 200  | 61     | 1.5            | 81                 | 360 | 0.7                | 214 | 952     | 3.2                 | 296 | 1,317   | —                  | —   | —       |
|               | 225  | 69     | 1.5            | 91                 | 405 | 0.7                | 234 | 1,040   | 3.3                 | 322 | 1,434   | —                  | —   | —       |
|               | 250  | 76     | 1.5            | 101                | 449 | 0.7                | 253 | 1,125   | 3.4                 | 348 | 1,547   | —                  | —   | —       |
|               | 275  | 84     | 1.5            | 112                | 498 | 0.7                | 272 | 1,209   | 3.5                 | 372 | 1,657   | —                  | —   | —       |
|               | 300  | 91     | 1.5            | 122                | 543 | 0.7                | 290 | 1,290   | 3.5                 | 397 | 1,765   | —                  | —   | —       |
|               | 325  | 99     | 1.5            | 132                | 587 | 0.8                | 308 | 1,370   | —                   | —   | —       | —                  | —   | —       |
|               | 350  | 107    | 1.5            | 142                | 632 | 0.8                | 325 | 1,448   | —                   | —   | —       | —                  | —   | —       |
|               | 375  | 114    | 1.5            | 152                | 676 | 0.8                | 343 | 1,525   | —                   | —   | —       | —                  | —   | —       |
|               | 400  | 122    | 1.5            | 162                | 721 | 0.8                | 360 | 1,601   | —                   | —   | —       | —                  | —   | —       |
|               | 425  | 130    | 1.5            | 172                | 765 | 0.8                | 377 | 1,676   | —                   | —   | —       | —                  | —   | —       |
|               | 450  | 137    | 1.5            | 183                | 814 | 0.8                | 393 | 1,750   | —                   | —   | —       | —                  | —   | —       |

## Mini-Span® ADSS Cable

### Sag and Tension Information

| CABLE         | SPAN |        | INITIAL<br>SAG | INITIAL<br>TENSION |       | NESC LIGHT LOADING |         |       | NESC MEDIUM LOADING |         |       | NESC HEAVY LOADING |         |       |
|---------------|------|--------|----------------|--------------------|-------|--------------------|---------|-------|---------------------|---------|-------|--------------------|---------|-------|
|               |      |        |                |                    |       | SAG                | TENSION |       | SAG                 | TENSION |       | SAG                | TENSION |       |
|               | FEET | METERS | %              | LBS                | N     | %                  | LBS     | N     | %                   | LBS     | N     | %                  | LBS     | N     |
| MINI-SPAN 424 | 50   | 15     | 1.0            | 35                 | 156   | 0.4                | 104     | 463   | 1.7                 | 142     | 632   | 2.6                | 207     | 921   |
|               | 75   | 23     | 1.0            | 53                 | 236   | 0.4                | 142     | 632   | 1.9                 | 191     | 850   | 3.0                | 275     | 1,223 |
|               | 100  | 30     | 1.0            | 71                 | 316   | 0.5                | 176     | 783   | 2.1                 | 235     | 1,095 | 3.2                | 337     | 1,499 |
|               | 125  | 38     | 1.0            | 88                 | 391   | 0.5                | 208     | 925   | 2.2                 | 276     | 1,228 | 3.4                | 395     | 1,757 |
|               | 150  | 46     | 1.0            | 106                | 472   | 0.5                | 238     | 1,059 | 2.4                 | 315     | 1,401 | 3.6                | 449     | 1,997 |
|               | 175  | 53     | 1.0            | 124                | 552   | 0.5                | 268     | 1,192 | 2.5                 | 353     | 1,570 | 3.8                | 501     | 2,229 |
|               | 200  | 61     | 1.0            | 141                | 627   | 0.6                | 296     | 1,317 | 2.6                 | 389     | 1,730 | 4.0                | 50      | 2,447 |
|               | 225  | 69     | 1.0            | 159                | 707   | 0.6                | 324     | 1,441 | 2.7                 | 424     | 1,886 | 4.1                | 598     | 2,660 |
|               | 250  | 76     | 1.0            | 177                | 787   | 0.6                | 351     | 1,561 | 2.7                 | 458     | 2,037 | 4.2                | 645     | 2,869 |
|               | 275  | 84     | 1.0            | 194                | 863   | 0.6                | 378     | 1,681 | 2.8                 | 491     | 2,184 | 4.3                | 690     | 3,069 |
|               | 300  | 91     | 1.0            | 212                | 943   | 0.6                | 404     | 1,737 | 2.8                 | 524     | 2,331 | —                  | —       | —     |
|               | 325  | 99     | 1.0            | 230                | 1,023 | 0.6                | 429     | 1,908 | 2.9                 | 556     | 2,473 | —                  | —       | —     |
|               | 350  | 107    | 1.0            | 247                | 1,099 | 0.6                | 455     | 2,024 | 3.0                 | 587     | 2,611 | —                  | —       | —     |
|               | 375  | 114    | 1.0            | 265                | 1,179 | 0.6                | 479     | 2,131 | 3.0                 | 618     | 2,749 | —                  | —       | —     |
|               | 400  | 122    | 1.0            | 283                | 1,259 | 0.6                | 504     | 2,242 | 3.1                 | 648     | 2,882 | —                  | —       | —     |
|               | 425  | 130    | 1.0            | 300                | 1,334 | 0.7                | 528     | 2,349 | 3.1                 | 678     | 3,016 | —                  | —       | —     |
|               | 450  | 137    | 1.0            | 318                | 1,415 | 0.7                | 552     | 2,455 | 3.2                 | 703     | 3,145 | —                  | —       | —     |
|               | 475  | 145    | 1.0            | 336                | 1,495 | 0.7                | 576     | 2,562 | —                   | —       | —     | —                  | —       | —     |
|               | 500  | 152    | 1.0            | 353                | 1,570 | 0.7                | 600     | 2,669 | —                   | —       | —     | —                  | —       | —     |
|               | 525  | 160    | 1.0            | 371                | 1,650 | 0.7                | 623     | 2,771 | —                   | —       | —     | —                  | —       | —     |
|               | 550  | 168    | 1.0            | 389                | 1,730 | 0.7                | 646     | 2,874 | —                   | —       | —     | —                  | —       | —     |
| 575           | 175  | 1.0    | 406            | 1,806              | 0.7   | 669                | 2,976   | —     | —                   | —       | —     | —                  | —       |       |
| 600           | 183  | 1.0    | 424            | 1,886              | 0.7   | 692                | 3,078   | —     | —                   | —       | —     | —                  | —       |       |
| MINI-SPAN 484 | 50   | 15     | 1.0            | 51                 | 227   | 0.4                | 131     | 583   | 1.6                 | 172     | 765   | 2.4                | 247     | 1,099 |
|               | 75   | 23     | 1.0            | 76                 | 338   | 0.5                | 179     | 797   | 1.8                 | 232     | 1,032 | 2.7                | 331     | 1,473 |
|               | 100  | 30     | 1.0            | 101                | 449   | 0.5                | 223     | 992   | 2.0                 | 287     | 1,277 | 2.9                | 406     | 1,807 |
|               | 125  | 38     | 1.0            | 126                | 561   | 0.5                | 264     | 1,175 | 2.1                 | 338     | 1,504 | 3.1                | 477     | 2,123 |
|               | 150  | 46     | 1.0            | 152                | 676   | 0.6                | 304     | 1,353 | 2.2                 | 387     | 1,722 | 3.2                | 543     | 2,416 |
|               | 175  | 53     | 1.0            | 177                | 788   | 0.6                | 342     | 1,522 | 2.3                 | 434     | 1,931 | 3.4                | 607     | 2,701 |
|               | 200  | 61     | 1.0            | 202                | 899   | 0.6                | 379     | 1,687 | 2.3                 | 480     | 2,136 | 3.5                | 668     | 2,973 |
|               | 225  | 69     | 1.0            | 228                | 1,015 | 0.6                | 416     | 1,851 | 2.4                 | 524     | 2,332 | 3.6                | 727     | 3,235 |
|               | 250  | 76     | 1.0            | 253                | 1,126 | 0.6                | 451     | 2,007 | 2.5                 | 567     | 2,523 | 3.7                | 784     | 3,489 |
|               | 275  | 84     | 1.0            | 278                | 1,237 | 0.6                | 486     | 2,163 | 2.5                 | 609     | 2,710 | 3.8                | 840     | 3,738 |
|               | 300  | 91     | 1.0            | 303                | 1,348 | 0.7                | 521     | 2,318 | 2.6                 | 650     | 2,893 | —                  | —       | —     |
|               | 325  | 99     | 1.0            | 329                | 1,464 | 0.7                | 554     | 2,465 | 2.6                 | 690     | 3,071 | —                  | —       | —     |
|               | 350  | 107    | 1.0            | 354                | 1,575 | 0.7                | 588     | 2,617 | 2.7                 | 730     | 3,249 | —                  | —       | —     |
|               | 375  | 114    | 1.0            | 379                | 1,687 | 0.7                | 621     | 2,763 | 2.7                 | 769     | 3,422 | —                  | —       | —     |
|               | 400  | 122    | 1.0            | 405                | 1,802 | 0.7                | 653     | 2,906 | 2.8                 | 808     | 3,596 | —                  | —       | —     |
|               | 425  | 130    | 1.0            | 430                | 1,914 | 0.7                | 686     | 3,053 | —                   | —       | —     | —                  | —       | —     |
|               | 450  | 137    | 1.0            | 455                | 2,025 | 0.7                | 718     | 3,195 | —                   | —       | —     | —                  | —       | —     |
|               | 475  | 145    | 1.0            | 480                | 2,136 | 0.7                | 749     | 3,333 | —                   | —       | —     | —                  | —       | —     |
|               | 500  | 152    | 1.0            | 506                | 2,252 | 0.7                | 781     | 3,475 | —                   | —       | —     | —                  | —       | —     |
|               | 525  | 160    | 1.0            | 531                | 2,363 | 0.7                | 812     | 3,613 | —                   | —       | —     | —                  | —       | —     |

## Mini-Span® ADSS Cable

### Sag and Tension Information

| CABLE         | SPAN  |        | INITIAL<br>SAG | INITIAL<br>TENSION |       | NESC LIGHT LOADING |       |         | NESC MEDIUM LOADING |       |         | NESC HEAVY LOADING |       |         |
|---------------|-------|--------|----------------|--------------------|-------|--------------------|-------|---------|---------------------|-------|---------|--------------------|-------|---------|
|               |       |        |                |                    |       | SAG                |       | TENSION | SAG                 |       | TENSION | SAG                |       | TENSION |
|               | FEET  | METERS | %              | LBS                | N     | %                  | LBS   |         | %                   | LBS   |         | %                  | LBS   |         |
| MINI-SPAN 535 | 50    | 15     | 1              | 62                 | 276   | 0.4                | 160   | 713     | 1.5                 | 206   | 918     | 2.1                | 297   | 1,319   |
|               | 100   | 30     | 1              | 124                | 552   | 0.5                | 274   | 1,220   | 1.7                 | 347   | 1,542   | 2.5                | 489   | 2,176   |
|               | 150   | 46     | 1              | 187                | 832   | 0.6                | 375   | 1,670   | 1.9                 | 469   | 2,087   | 2.8                | 655   | 2,915   |
|               | 200   | 61     | 1              | 249                | 1,108 | 0.6                | 469   | 2,088   | 2.1                 | 582   | 2,590   | 3.1                | 807   | 3,588   |
|               | 250   | 76     | 1              | 311                | 1,383 | 0.6                | 559   | 2,486   | 2.2                 | 689   | 3,063   | 3.3                | 948   | 4,217   |
|               | 300   | 91     | 1              | 373                | 1,659 | 0.6                | 645   | 2,868   | 2.3                 | 790   | 3,515   | 3.4                | 1,082 | 4,813   |
|               | 350   | 107    | 1              | 435                | 1,935 | 0.7                | 728   | 3,239   | 2.4                 | 888   | 3,951   | 3.6                | 1,210 | 5,384   |
|               | 400   | 122    | 1              | 497                | 2,211 | 0.7                | 810   | 3,601   | 2.5                 | 983   | 4,374   | 3.7                | 1,334 | 5,935   |
|               | 450   | 137    | 1              | 560                | 2,491 | 0.7                | 889   | 3,956   | 2.5                 | 1,076 | 4,785   | 3.8                | 1,454 | 6,469   |
|               | 500   | 152    | 1              | 622                | 2,767 | 0.7                | 968   | 4,304   | 2.6                 | 1,166 | 5,188   | 3.9                | 1,571 | 6,988   |
|               | 550   | 168    | 1              | 684                | 3,043 | 0.7                | 1,045 | 4,647   | 2.7                 | 1,255 | 5,583   | 4.0                | 1,685 | 7,495   |
|               | 575   | 175    | 1              | 715                | 3,180 | 0.7                | 1,083 | 4,817   | 2.7                 | 1,299 | 5,778   | 4.1                | 1,741 | 7,745   |
|               | 600   | 183    | 1              | 746                | 3,318 | 0.7                | 1,121 | 4,985   | 2.7                 | 1,342 | 5,971   | —                  | —     | —       |
|               | 650   | 198    | 1              | 808                | 3,594 | 0.8                | 1,196 | 5,320   | 2.8                 | 1,428 | 6,353   | —                  | —     | —       |
|               | 700   | 213    | 1              | 870                | 3,870 | 0.8                | 1,270 | 5,650   | 2.8                 | 1,513 | 6,730   | —                  | —     | —       |
|               | 750   | 229    | 1              | 933                | 4,150 | 0.8                | 1,344 | 5,978   | 2.8                 | 1,597 | 7,102   | —                  | —     | —       |
|               | 800   | 244    | 1              | 995                | 4,426 | 0.8                | 1,417 | 6,303   | 2.9                 | 1,679 | 7,469   | —                  | —     | —       |
|               | 850   | 259    | 1              | 1,057              | 4,702 | 0.8                | 1,489 | 6,625   | 2.9                 | 1,761 | 7,833   | —                  | —     | —       |
|               | 900   | 274    | 1              | 1,119              | 4,978 | 0.8                | 1,561 | 6,945   | —                   | —     | —       | —                  | —     | —       |
|               | 950   | 290    | 1              | 1,181              | 5,253 | 0.8                | 1,633 | 7,263   | —                   | —     | —       | —                  | —     | —       |
|               | 1,000 | 305    | 1              | 1,243              | 5,529 | 0.8                | 1,704 | 7,579   | —                   | —     | —       | —                  | —     | —       |
|               | 1,050 | 320    | 1              | 1,306              | 5,809 | 0.8                | 1,775 | 7,894   | —                   | —     | —       | —                  | —     | —       |
| MINI-SPAN 693 | 50    | 15     | 1.0            | 94                 | 418   | 0.5                | 201   | 894     | 1.5                 | 241   | 1,072   | 2.1                | 336   | 1,495   |
|               | 100   | 30     | 1.0            | 188                | 836   | 0.6                | 347   | 1,544   | 1.8                 | 409   | 1,820   | 2.6                | 558   | 2,483   |
|               | 150   | 46     | 1.0            | 282                | 1,255 | 0.6                | 479   | 2,131   | 2.0                 | 559   | 2,487   | 2.9                | 752   | 3,346   |
|               | 200   | 61     | 1.0            | 376                | 1,673 | 0.7                | 602   | 2,679   | 2.1                 | 698   | 3,106   | 3.1                | 930   | 4,138   |
|               | 250   | 76     | 1.0            | 470                | 2,091 | 0.7                | 721   | 3,208   | 2.2                 | 830   | 3,693   | 3.3                | 1,097 | 4,881   |
|               | 300   | 91     | 1.0            | 565                | 2,514 | 0.7                | 836   | 3,720   | 2.3                 | 958   | 4,263   | 3.4                | 1,257 | 5,593   |
|               | 350   | 107    | 1.0            | 659                | 2,932 | 0.8                | 949   | 4,223   | 2.4                 | 1,081 | 4,810   | 3.6                | 1,411 | 6,278   |
|               | 400   | 122    | 1.0            | 753                | 3,350 | 0.8                | 1,059 | 4,712   | 2.5                 | 1,202 | 5,348   | 3.7                | 1,560 | 6,941   |
|               | 450   | 137    | 1.0            | 847                | 3,769 | 0.8                | 1,168 | 5,197   | 2.5                 | 1,321 | 5,878   | 3.8                | 1,705 | 7,586   |
|               | 500   | 152    | 1.0            | 941                | 4,187 | 0.8                | 1,275 | 5,673   | 2.6                 | 1,437 | 6,394   | 3.9                | 1,847 | 8,218   |
|               | 550   | 168    | 1.0            | 1,035              | 4,605 | 0.8                | 1,381 | 6,145   | 2.6                 | 1,552 | 6,906   | —                  | —     | —       |
|               | 600   | 183    | 1.0            | 1,129              | 5,023 | 0.8                | 1,486 | 6,612   | 2.7                 | 1,665 | 7,408   | —                  | —     | —       |
|               | 650   | 198    | 1.0            | 1,223              | 5,442 | 0.8                | 1,591 | 7,079   | —                   | —     | —       | —                  | —     | —       |
|               | 700   | 213    | 1.0            | 1,317              | 5,860 | 0.9                | 1,694 | 7,537   | —                   | —     | —       | —                  | —     | —       |
|               | 750   | 229    | 1.0            | 1,411              | 6,278 | 0.9                | 1,797 | 7,996   | —                   | —     | —       | —                  | —     | —       |

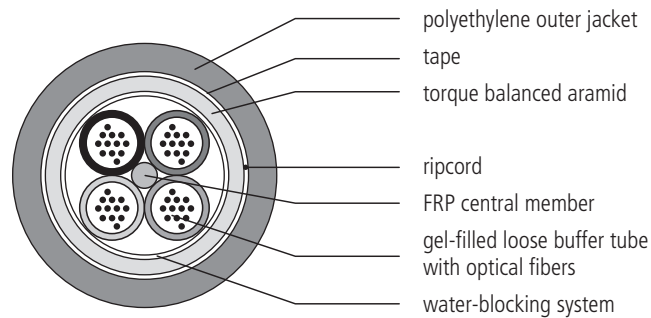
## Mini-Span® ADSS Cable

### Reel Information

| REEL SPECS                                | REEL A    |         | REEL B    |          | REEL C    |          | REEL D    |          | REEL E    |         |
|-------------------------------------------|-----------|---------|-----------|----------|-----------|----------|-----------|----------|-----------|---------|
| ITEM                                      | 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  |
| <b>MAXIMUM CABLE LENGTH (feet/meters)</b> |           |         |           |          |           |          |           |          |           |         |
| Mini-Span 323                             | 15,256 ft | 4,650 m | 32,800 ft | 10,000 m | —         | —        | —         | —        | —         | —       |
| Mini-Span 383                             | 10,827 ft | 3,300 m | 25,202 ft | 7,700 m  | 32,800 ft | 10,000 m | —         | —        | —         | —       |
| Mini-Span 424                             | 8,850 ft  | 2,700 m | 20,250 ft | 6,200 m  | 26,250 ft | 8,000 m  | 32,800 ft | 10,000 m | —         | —       |
| Mini-Span 484                             | 6,500 ft  | 2,000 m | 15,750 ft | 4,800 m  | 21,000 ft | 6,450 m  | 32,800 ft | 10,000 m | —         | —       |
| Mini-Span 535                             | 5,500 ft  | 1,675 m | 12,800 ft | 3,900 m  | 17,225 ft | 5,250 m  | 22,700 ft | 6,920 m  | —         | —       |
| Mini-Span 693                             | —         | —       | 9,300 ft  | 2,835 m  | 12,500 ft | 3,810 m  | 16,330 ft | 4,975 m  | 23,000 ft | 7,000 m |

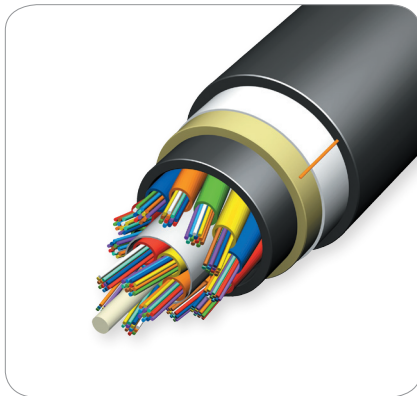
AFL provides ADSS cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available on request.

### Typical Cable Components



### Temperature Range

Operating - 40°C to + 70°C  
 Storage - 50°C to + 70°C  
 Installation - 30°C to + 70°C



### Standard ADSS Fiber Optic Cable

AFL-ADSS® (All-Dielectric Self-Supporting) cable is ideal for installation in distribution as well as transmission environments, even when live-line installations are required. As its name indicates, there is no support or messenger wire required, so installation is achieved in a single pass, making ADSS an economical and simple means of achieving a fiber optic network. AFL manufactures its own line of attachment hardware as well as supplies formed wire fittings when preferred.

#### Temperature Range

Operating - 40°C to + 70°C

Storage - 50°C to + 70°C

Installation - 30°C to + 70°C

#### Typical Maximum Lengths

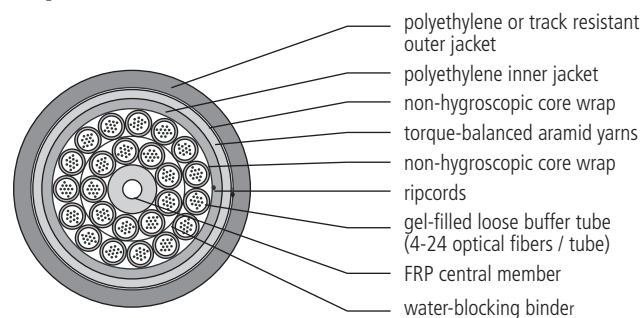
| CABLE DIAMETER   | REEL CAPACITY |        |
|------------------|---------------|--------|
|                  | FEET          | METERS |
| ≤ 0.85" (21.6mm) | 23,000        | 7,000  |
| > 0.85" (21.6mm) | 10,000        | 3,000  |

NOTE: Longer lengths may be available upon request.  
Lengths shown may require non-standard reel sizes/types.

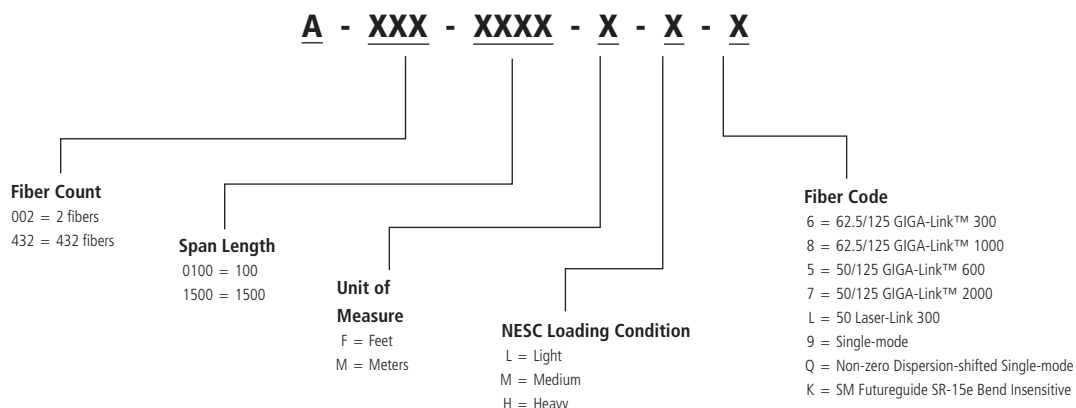
#### Features

- Suitable for use on distribution and high voltage transmission lines
- Track-resistant outer jacket available for installations on high voltage lines where space potentials reach up to 25 kV
- Gel-filled buffer tubes are S-Z stranded for easy mid-span access
- Cable is water-blocked using dry core technology, therefore no messy flooding compounds
- Design details listed below for span lengths up to 1500ft (457 m) and fiber counts up to 432
- Custom designs available for larger span lengths or other fiber counts

#### Cable Components



#### Ordering Information



NOTE: The designs listed are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.

## Standard ADSS Fiber Optic Cable

### Optical Information

| FIBER TYPE                                  | MAXIMUM ATTENUATION<br>(dB/km) |        |        |        | OVERFILL LAUNCH MIN.<br>BANDWIDTH (MHz•km) |        | GIGABIT ETHERNET<br>MINIMUM<br>LINK DISTANCE (meters) |        |
|---------------------------------------------|--------------------------------|--------|--------|--------|--------------------------------------------|--------|-------------------------------------------------------|--------|
|                                             | 850nm                          | 1300nm | 1310nm | 1550nm | 850nm                                      | 1300nm | 850nm                                                 | 1300nm |
| (6) 62.5/125 GIGA-Link™ 300                 | 3.5                            | 1.2    | N/A    | N/A    | 200                                        | 600    | 300                                                   | 550    |
| (8) 62.5/125 GIGA-Link™ 1000                | 3.5                            | 1.2    | N/A    | N/A    | 350                                        | 600    | 500                                                   | 1000   |
| (5) 50/125 GIGA-Link™ 600                   | 2.9                            | 0.9    | N/A    | N/A    | 500                                        | 500    | 600                                                   | 600    |
| (7) 50/125 GIGA-Link™ 2000                  | 2.9                            | 0.9    | N/A    | N/A    | 500                                        | 800    | 750                                                   | 2000   |
| (L) 50 Laser-Link 300                       | 3.5                            | 1.2    | 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) SM Futureguide SR-15e Bend Insensitive  | 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.

### 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      | 182.9  | 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 | 311 kg | 950 lbs | 431 kg |

AFL provides ADSS cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request.

## Standard ADSS Fiber Optic Cable

### NESC LIGHT LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |      |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |      | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N    | SAG %  | LBS  | N     |
| <b>12 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 100             | 446  | 0.6    | 194  | 862   |
| 200              | 61     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 201             | 892  | 0.7    | 333  | 1479  |
| 300              | 91     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 301             | 1338 | 0.7    | 459  | 2043  |
| 400              | 122    | 0.080  | 119   | 0.500    | 12.7 | 628  | 2793  | 401             | 1785 | 0.8    | 597  | 2654  |
| 500              | 152    | 0.080  | 119   | 0.500    | 12.7 | 746  | 3320  | 502             | 2232 | 0.8    | 739  | 3286  |
| 600              | 183    | 0.080  | 119   | 0.500    | 12.7 | 936  | 4162  | 602             | 2679 | 0.8    | 894  | 3976  |
| 700              | 213    | 0.084  | 125   | 0.512    | 13.0 | 1126 | 5008  | 737             | 3280 | 0.8    | 1079 | 4800  |
| 800              | 244    | 0.084  | 125   | 0.512    | 13.0 | 1253 | 5572  | 843             | 3750 | 0.8    | 1227 | 5459  |
| 900              | 274    | 0.084  | 126   | 0.512    | 13.0 | 1569 | 6981  | 949             | 4221 | 0.8    | 1409 | 6269  |
| 1000             | 305    | 0.084  | 126   | 0.512    | 13.0 | 1569 | 6981  | 1054            | 4690 | 0.8    | 1535 | 6829  |
| 1100             | 335    | 0.085  | 126   | 0.512    | 13.0 | 1823 | 8108  | 1162            | 5171 | 0.8    | 1708 | 7595  |
| 1200             | 366    | 0.090  | 134   | 0.528    | 13.4 | 1950 | 8672  | 1350            | 6005 | 0.8    | 1926 | 8569  |
| 1300             | 396    | 0.090  | 134   | 0.528    | 13.4 | 2203 | 9799  | 1463            | 6508 | 0.8    | 2103 | 9356  |
| 1400             | 427    | 0.090  | 134   | 0.528    | 13.4 | 2330 | 10363 | 1576            | 7010 | 0.8    | 2258 | 10044 |
| 1500             | 457    | 0.090  | 134   | 0.528    | 13.4 | 2456 | 10927 | 1689            | 7512 | 0.8    | 2412 | 10731 |
| <b>24 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 102             | 452  | 0.6    | 194  | 865   |
| 200              | 61     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 203             | 904  | 0.7    | 334  | 1486  |
| 300              | 91     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 305             | 1356 | 0.7    | 462  | 2053  |
| 400              | 122    | 0.081  | 121   | 0.500    | 12.7 | 628  | 2793  | 407             | 1808 | 0.8    | 600  | 2668  |
| 500              | 152    | 0.081  | 121   | 0.500    | 12.7 | 746  | 3320  | 508             | 2261 | 0.8    | 743  | 3304  |
| 600              | 183    | 0.081  | 121   | 0.500    | 12.7 | 936  | 4162  | 610             | 2714 | 0.8    | 899  | 3998  |
| 700              | 213    | 0.085  | 127   | 0.512    | 13.0 | 1126 | 5008  | 747             | 3322 | 0.8    | 1085 | 4826  |
| 800              | 244    | 0.085  | 127   | 0.512    | 13.0 | 1253 | 5572  | 854             | 3797 | 0.8    | 1234 | 5489  |
| 900              | 274    | 0.085  | 127   | 0.512    | 13.0 | 1569 | 6981  | 961             | 4274 | 0.8    | 1416 | 6301  |
| 1000             | 305    | 0.085  | 127   | 0.512    | 13.0 | 1696 | 7545  | 1068            | 4750 | 0.8    | 1566 | 6965  |
| 1100             | 335    | 0.086  | 127   | 0.512    | 13.0 | 1823 | 8108  | 1177            | 5236 | 0.8    | 1717 | 7635  |
| 1200             | 366    | 0.091  | 135   | 0.528    | 13.4 | 1950 | 8672  | 1366            | 6075 | 0.8    | 1937 | 8614  |
| 1300             | 396    | 0.091  | 136   | 0.528    | 13.4 | 2203 | 9799  | 1480            | 6584 | 0.8    | 2114 | 9405  |
| 1400             | 427    | 0.091  | 136   | 0.528    | 13.4 | 2456 | 10927 | 1595            | 7094 | 0.8    | 2292 | 10194 |
| 1500             | 457    | 0.091  | 136   | 0.528    | 13.4 | 2583 | 11490 | 1709            | 7602 | 0.8    | 2447 | 10886 |
| <b>36 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.082  | 123   | 0.500    | 12.7 | 539  | 2398  | 103             | 458  | 0.6    | 195  | 867   |
| 200              | 61     | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 206             | 916  | 0.7    | 343  | 1526  |
| 300              | 91     | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 309             | 1375 | 0.8    | 464  | 2064  |
| 400              | 122    | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 412             | 1833 | 0.8    | 598  | 2660  |
| 500              | 152    | 0.082  | 123   | 0.500    | 12.7 | 776  | 3452  | 515             | 2291 | 0.8    | 752  | 3345  |
| 600              | 183    | 0.082  | 123   | 0.500    | 12.7 | 999  | 4444  | 618             | 2749 | 0.8    | 915  | 4070  |
| 700              | 213    | 0.086  | 129   | 0.512    | 13.0 | 1189 | 5290  | 756             | 3363 | 0.8    | 1102 | 4902  |
| 800              | 244    | 0.086  | 129   | 0.512    | 13.0 | 1253 | 5572  | 864             | 3843 | 0.8    | 1241 | 5520  |
| 900              | 274    | 0.086  | 129   | 0.512    | 13.0 | 1569 | 6981  | 973             | 4328 | 0.8    | 1424 | 6334  |
| 1000             | 305    | 0.086  | 129   | 0.512    | 13.0 | 1569 | 6981  | 1081            | 4809 | 0.8    | 1552 | 6904  |
| 1100             | 335    | 0.087  | 129   | 0.512    | 13.0 | 1823 | 8108  | 1192            | 5302 | 0.8    | 1726 | 7678  |
| 1200             | 366    | 0.092  | 137   | 0.528    | 13.4 | 2076 | 9236  | 1382            | 6147 | 0.8    | 1969 | 8759  |
| 1300             | 396    | 0.092  | 137   | 0.528    | 13.4 | 2203 | 9799  | 1497            | 6659 | 0.8    | 2125 | 9452  |
| 1400             | 427    | 0.092  | 137   | 0.528    | 13.4 | 2330 | 10363 | 1613            | 7175 | 0.8    | 2281 | 10146 |
| 1500             | 457    | 0.092  | 137   | 0.528    | 13.4 | 2456 | 10927 | 1728            | 7687 | 0.8    | 2438 | 10845 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC LIGHT LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |      |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |      | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N    | SAG %  | LBS  | N     |
| <b>48 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.083  | 124   | 0.500    | 12.7 | 539  | 2398  | 104             | 463  | 0.6    | 196  | 872   |
| 200              | 61     | 0.083  | 124   | 0.500    | 12.7 | 598  | 2661  | 209             | 930  | 0.7    | 344  | 1530  |
| 300              | 91     | 0.083  | 124   | 0.500    | 12.7 | 598  | 2661  | 313             | 1392 | 0.7    | 476  | 2117  |
| 400              | 122    | 0.083  | 124   | 0.500    | 12.7 | 628  | 2793  | 417             | 1855 | 0.8    | 606  | 2696  |
| 500              | 152    | 0.083  | 124   | 0.500    | 12.7 | 776  | 3452  | 522             | 2322 | 0.8    | 756  | 3363  |
| 600              | 183    | 0.083  | 124   | 0.500    | 12.7 | 999  | 4444  | 626             | 2785 | 0.8    | 920  | 4092  |
| 700              | 213    | 0.087  | 130   | 0.512    | 13.0 | 1189 | 5290  | 765             | 3403 | 0.8    | 1108 | 4929  |
| 800              | 244    | 0.087  | 130   | 0.512    | 13.0 | 1253 | 5572  | 875             | 3892 | 0.8    | 1247 | 5547  |
| 900              | 274    | 0.088  | 130   | 0.512    | 13.0 | 1569 | 6981  | 985             | 4381 | 0.8    | 1431 | 6365  |
| 1000             | 305    | 0.088  | 130   | 0.512    | 13.0 | 1569 | 6981  | 1094            | 4866 | 0.8    | 1560 | 6939  |
| 1100             | 335    | 0.088  | 131   | 0.512    | 13.0 | 1823 | 8108  | 1206            | 5365 | 0.8    | 1735 | 7718  |
| 1200             | 366    | 0.093  | 139   | 0.528    | 13.4 | 2076 | 9236  | 1398            | 6219 | 0.8    | 1979 | 8803  |
| 1300             | 396    | 0.093  | 139   | 0.528    | 13.4 | 2330 | 10363 | 1515            | 6739 | 0.8    | 2158 | 9599  |
| 1400             | 427    | 0.093  | 139   | 0.528    | 13.4 | 2456 | 10927 | 1632            | 7259 | 0.8    | 2315 | 10298 |
| 1500             | 457    | 0.093  | 139   | 0.528    | 13.4 | 2456 | 10927 | 1748            | 7775 | 0.8    | 2450 | 10898 |
| <b>60 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 106             | 472  | 0.6    | 197  | 876   |
| 200              | 61     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 211             | 939  | 0.7    | 339  | 1508  |
| 300              | 91     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 317             | 1410 | 0.8    | 469  | 2086  |
| 400              | 122    | 0.084  | 126   | 0.500    | 12.7 | 628  | 2793  | 422             | 1877 | 0.8    | 610  | 2713  |
| 500              | 152    | 0.085  | 126   | 0.500    | 12.7 | 809  | 3599  | 528             | 2349 | 0.8    | 766  | 3407  |
| 600              | 183    | 0.085  | 126   | 0.500    | 12.7 | 936  | 4162  | 634             | 2820 | 0.8    | 914  | 4066  |
| 700              | 213    | 0.089  | 132   | 0.512    | 13.0 | 1126 | 5008  | 775             | 3447 | 0.8    | 1102 | 4902  |
| 800              | 244    | 0.089  | 132   | 0.512    | 13.0 | 1316 | 5854  | 885             | 3937 | 0.8    | 1265 | 5627  |
| 900              | 274    | 0.089  | 132   | 0.512    | 13.0 | 1569 | 6981  | 997             | 4435 | 0.8    | 1439 | 6401  |
| 1000             | 305    | 0.089  | 132   | 0.512    | 13.0 | 1569 | 6981  | 1107            | 4924 | 0.8    | 1568 | 6975  |
| 1100             | 335    | 0.089  | 132   | 0.512    | 13.0 | 1823 | 8108  | 1221            | 5431 | 0.8    | 1744 | 7758  |
| 1200             | 366    | 0.094  | 140   | 0.528    | 13.4 | 2076 | 9236  | 1414            | 6290 | 0.8    | 1989 | 8848  |
| 1300             | 396    | 0.094  | 140   | 0.528    | 13.4 | 2330 | 10363 | 1532            | 6815 | 0.8    | 2169 | 9648  |
| 1400             | 427    | 0.094  | 140   | 0.528    | 13.4 | 2330 | 10363 | 1650            | 7340 | 0.8    | 2305 | 10253 |
| 1500             | 457    | 0.094  | 140   | 0.528    | 13.4 | 2710 | 12054 | 1769            | 7869 | 0.8    | 2507 | 11152 |
| <b>72 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 125             | 556  | 0.6    | 235  | 1045  |
| 200              | 61     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 249             | 1108 | 0.7    | 405  | 1802  |
| 300              | 91     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 374             | 1664 | 0.7    | 561  | 2495  |
| 400              | 122    | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 499             | 2220 | 0.8    | 709  | 3154  |
| 500              | 152    | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 623             | 2771 | 0.8    | 853  | 3794  |
| 600              | 183    | 0.100  | 149   | 0.535    | 13.6 | 1031 | 4587  | 748             | 3327 | 0.8    | 1025 | 4559  |
| 700              | 213    | 0.108  | 161   | 0.559    | 14.2 | 1314 | 5843  | 949             | 4221 | 0.8    | 1280 | 5694  |
| 800              | 244    | 0.108  | 161   | 0.559    | 14.2 | 1504 | 6689  | 1084            | 4822 | 0.8    | 1464 | 6512  |
| 900              | 274    | 0.108  | 161   | 0.559    | 14.2 | 1884 | 8380  | 1221            | 5431 | 0.8    | 1677 | 7460  |
| 1000             | 305    | 0.108  | 161   | 0.559    | 14.2 | 1884 | 8380  | 1356            | 6032 | 0.8    | 1831 | 8145  |
| 1100             | 335    | 0.109  | 161   | 0.559    | 14.2 | 2011 | 8943  | 1492            | 6637 | 0.8    | 2004 | 8914  |
| 1200             | 366    | 0.109  | 162   | 0.559    | 14.2 | 2264 | 10071 | 1628            | 7242 | 0.8    | 2198 | 9777  |
| 1300             | 396    | 0.109  | 162   | 0.559    | 14.2 | 2391 | 10634 | 1767            | 7860 | 0.8    | 2374 | 10560 |
| 1400             | 427    | 0.109  | 162   | 0.559    | 14.2 | 2644 | 11762 | 1903            | 8465 | 0.8    | 2568 | 11423 |
| 1500             | 457    | 0.109  | 162   | 0.559    | 14.2 | 2771 | 12326 | 2040            | 9074 | 0.8    | 2741 | 12193 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC LIGHT LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>84 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 164             | 730   | 0.6    | 295  | 1312  |
| 200               | 61     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 328             | 1459  | 0.7    | 512  | 2277  |
| 300               | 91     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 492             | 2189  | 0.8    | 712  | 3167  |
| 400               | 122    | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 656             | 2918  | 0.8    | 903  | 4017  |
| 500               | 152    | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 820             | 3648  | 0.8    | 1089 | 4844  |
| 600               | 183    | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 984             | 4377  | 0.9    | 1270 | 5649  |
| 700               | 213    | 0.131  | 195   | 0.610    | 15.5 | 1503 | 6685  | 1148            | 5107  | 0.9    | 1481 | 6588  |
| 800               | 244    | 0.131  | 195   | 0.610    | 15.5 | 1692 | 7528  | 1313            | 5841  | 0.9    | 1689 | 7513  |
| 900               | 274    | 0.131  | 195   | 0.610    | 15.5 | 1946 | 8655  | 1477            | 6570  | 0.9    | 1907 | 8483  |
| 1000              | 305    | 0.138  | 205   | 0.626    | 15.9 | 2326 | 10346 | 1725            | 7673  | 0.9    | 2216 | 9857  |
| 1100              | 335    | 0.138  | 205   | 0.626    | 15.9 | 2453 | 10910 | 1898            | 8443  | 0.9    | 2422 | 10774 |
| 1200              | 366    | 0.138  | 205   | 0.626    | 15.9 | 2706 | 12037 | 2071            | 9212  | 0.9    | 2647 | 11774 |
| 1300              | 396    | 0.138  | 206   | 0.626    | 15.9 | 2960 | 13165 | 2244            | 9982  | 0.9    | 2872 | 12775 |
| 1400              | 427    | 0.138  | 206   | 0.626    | 15.9 | 3086 | 13728 | 2417            | 10751 | 0.9    | 3079 | 13696 |
| 1500              | 457    | 0.138  | 206   | 0.626    | 15.9 | 3340 | 14856 | 2590            | 11521 | 0.9    | 3304 | 14697 |
| <b>96 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 165             | 734   | 0.6    | 296  | 1317  |
| 200               | 61     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 331             | 1472  | 0.7    | 514  | 2286  |
| 300               | 91     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 496             | 2206  | 0.8    | 715  | 3180  |
| 400               | 122    | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 661             | 2940  | 0.8    | 907  | 4035  |
| 500               | 152    | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 827             | 3679  | 0.8    | 1093 | 4862  |
| 600               | 183    | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 992             | 4413  | 0.9    | 1276 | 5676  |
| 700               | 213    | 0.132  | 197   | 0.610    | 15.5 | 1503 | 6685  | 1158            | 5151  | 0.9    | 1488 | 6619  |
| 800               | 244    | 0.132  | 197   | 0.610    | 15.5 | 1756 | 7810  | 1324            | 5889  | 0.9    | 1706 | 7589  |
| 900               | 274    | 0.132  | 197   | 0.610    | 15.5 | 1946 | 8655  | 1489            | 6623  | 0.9    | 1915 | 8518  |
| 1000              | 305    | 0.139  | 207   | 0.626    | 15.9 | 2326 | 10346 | 1738            | 7731  | 0.9    | 2225 | 9897  |
| 1100              | 335    | 0.139  | 207   | 0.626    | 15.9 | 2453 | 10910 | 1912            | 8505  | 0.9    | 2433 | 10823 |
| 1200              | 366    | 0.139  | 207   | 0.626    | 15.9 | 2706 | 12037 | 2087            | 9283  | 0.9    | 2659 | 11828 |
| 1300              | 396    | 0.139  | 207   | 0.626    | 15.9 | 2960 | 13165 | 2261            | 10057 | 0.9    | 2885 | 12833 |
| 1400              | 427    | 0.139  | 207   | 0.626    | 15.9 | 3213 | 14292 | 2436            | 10836 | 0.9    | 3111 | 13838 |
| 1500              | 457    | 0.139  | 207   | 0.626    | 15.9 | 3340 | 14856 | 2610            | 11610 | 0.9    | 3319 | 14764 |
| <b>108 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 213             | 947   | 0.6    | 371  | 1650  |
| 200               | 61     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 426             | 1895  | 0.7    | 648  | 2882  |
| 300               | 91     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 639             | 2842  | 0.8    | 904  | 4021  |
| 400               | 122    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 852             | 3790  | 0.8    | 1149 | 5111  |
| 500               | 152    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1065            | 4737  | 0.8    | 1387 | 6170  |
| 600               | 183    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1278            | 5685  | 0.9    | 1621 | 7211  |
| 700               | 213    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1491            | 6632  | 0.9    | 1851 | 8234  |
| 800               | 244    | 0.170  | 254   | 0.685    | 17.4 | 2129 | 9470  | 1704            | 7580  | 0.9    | 2087 | 9283  |
| 900               | 274    | 0.178  | 264   | 0.701    | 17.8 | 2467 | 10972 | 1999            | 8892  | 0.9    | 2430 | 10809 |
| 1000              | 305    | 0.178  | 265   | 0.701    | 17.8 | 2720 | 12099 | 2222            | 9884  | 0.9    | 2698 | 12001 |
| 1100              | 335    | 0.178  | 265   | 0.701    | 17.8 | 3100 | 13790 | 2447            | 10885 | 0.9    | 2984 | 13273 |
| 1200              | 366    | 0.178  | 265   | 0.701    | 17.8 | 3354 | 14918 | 2670            | 11877 | 0.9    | 3252 | 14466 |
| 1300              | 396    | 0.178  | 265   | 0.701    | 17.8 | 3607 | 16045 | 2893            | 12869 | 0.9    | 3520 | 15658 |
| 1400              | 427    | 0.178  | 265   | 0.701    | 17.8 | 3860 | 17172 | 3117            | 13865 | 0.9    | 3789 | 16854 |
| 1500              | 457    | 0.178  | 265   | 0.701    | 17.8 | 4114 | 18300 | 3340            | 14857 | 0.9    | 4057 | 18046 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC LIGHT LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>120 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 214             | 952   | 0.6    | 371  | 1650  |
| 200               | 61     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 429             | 1908  | 0.7    | 650  | 2891  |
| 300               | 91     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 643             | 2860  | 0.8    | 906  | 4030  |
| 400               | 122    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 857             | 3812  | 0.8    | 1152 | 5124  |
| 500               | 152    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1072            | 4768  | 0.8    | 1392 | 6192  |
| 600               | 183    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1286            | 5720  | 0.9    | 1627 | 7237  |
| 700               | 213    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1501            | 6677  | 0.9    | 1858 | 8265  |
| 800               | 244    | 0.172  | 255   | 0.685    | 17.4 | 2129 | 9470  | 1715            | 7629  | 0.9    | 2095 | 9319  |
| 900               | 274    | 0.179  | 266   | 0.701    | 17.8 | 2467 | 10972 | 2011            | 8945  | 0.9    | 2440 | 10854 |
| 1000              | 305    | 0.179  | 266   | 0.701    | 17.8 | 2720 | 12099 | 2235            | 9942  | 0.9    | 2709 | 12050 |
| 1100              | 335    | 0.179  | 266   | 0.701    | 17.8 | 3100 | 13790 | 2462            | 10952 | 0.9    | 2995 | 13322 |
| 1200              | 366    | 0.179  | 267   | 0.701    | 17.8 | 3354 | 14918 | 2686            | 11948 | 0.9    | 3264 | 14519 |
| 1300              | 396    | 0.179  | 267   | 0.701    | 17.8 | 3607 | 16045 | 2911            | 12949 | 0.9    | 3533 | 15716 |
| 1400              | 427    | 0.179  | 267   | 0.701    | 17.8 | 3860 | 17172 | 3136            | 13950 | 0.9    | 3803 | 16917 |
| 1500              | 457    | 0.179  | 267   | 0.701    | 17.8 | 4114 | 18300 | 3360            | 14946 | 0.9    | 4072 | 18113 |
| <b>132 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 260             | 1157  | 0.7    | 415  | 1846  |
| 200               | 61     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 520             | 2313  | 0.8    | 734  | 3265  |
| 300               | 91     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 780             | 3470  | 0.8    | 1031 | 4586  |
| 400               | 122    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1040            | 4626  | 0.9    | 1318 | 5863  |
| 500               | 152    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1300            | 5783  | 0.9    | 1599 | 7113  |
| 600               | 183    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1560            | 6939  | 0.9    | 1875 | 8340  |
| 700               | 213    | 0.208  | 310   | 0.764    | 19.4 | 2188 | 9734  | 1821            | 8100  | 0.9    | 2163 | 9622  |
| 800               | 244    | 0.208  | 310   | 0.764    | 19.4 | 2530 | 11253 | 2081            | 9257  | 0.9    | 2476 | 11014 |
| 900               | 274    | 0.208  | 310   | 0.764    | 19.4 | 2783 | 12381 | 2342            | 10418 | 0.9    | 2778 | 12357 |
| 1000              | 305    | 0.216  | 322   | 0.780    | 19.8 | 3227 | 14354 | 2704            | 12028 | 0.9    | 3194 | 14208 |
| 1100              | 335    | 0.216  | 322   | 0.780    | 19.8 | 3607 | 16045 | 2975            | 13233 | 0.9    | 3521 | 15662 |
| 1200              | 366    | 0.217  | 322   | 0.780    | 19.8 | 3860 | 17172 | 3248            | 14448 | 0.9    | 3835 | 17059 |
| 1300              | 396    | 0.217  | 322   | 0.780    | 19.8 | 4241 | 18863 | 3520            | 15658 | 0.9    | 4162 | 18513 |
| 1400              | 427    | 0.217  | 322   | 0.780    | 19.8 | 4494 | 19991 | 3792            | 16868 | 0.9    | 4475 | 19906 |
| 1500              | 457    | 0.217  | 323   | 0.780    | 19.8 | 4874 | 21682 | 4064            | 18078 | 0.9    | 4802 | 21360 |
| <b>144 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 261             | 1161  | 0.7    | 416  | 1850  |
| 200               | 61     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 523             | 2326  | 0.8    | 736  | 3274  |
| 300               | 91     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 784             | 3487  | 0.8    | 1034 | 4599  |
| 400               | 122    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1046            | 4653  | 0.9    | 1322 | 5881  |
| 500               | 152    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1307            | 5814  | 0.9    | 1604 | 7135  |
| 600               | 183    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1568            | 6975  | 0.9    | 1882 | 8372  |
| 700               | 213    | 0.209  | 311   | 0.764    | 19.4 | 2188 | 9734  | 1830            | 8140  | 0.9    | 2170 | 9653  |
| 800               | 244    | 0.209  | 311   | 0.764    | 19.4 | 2530 | 11253 | 2092            | 9306  | 0.9    | 2484 | 11049 |
| 900               | 274    | 0.209  | 311   | 0.764    | 19.4 | 2847 | 12663 | 2354            | 10471 | 0.9    | 2795 | 12433 |
| 1000              | 305    | 0.217  | 324   | 0.780    | 19.8 | 3227 | 14354 | 2717            | 12086 | 0.9    | 3205 | 14257 |
| 1100              | 335    | 0.217  | 324   | 0.780    | 19.8 | 3607 | 16045 | 2990            | 13300 | 0.9    | 3533 | 15716 |
| 1200              | 366    | 0.218  | 324   | 0.780    | 19.8 | 3860 | 17172 | 3265            | 14523 | 0.9    | 3848 | 17117 |
| 1300              | 396    | 0.218  | 324   | 0.780    | 19.8 | 4241 | 18863 | 3538            | 15738 | 0.9    | 4176 | 18576 |
| 1400              | 427    | 0.218  | 324   | 0.780    | 19.8 | 4494 | 19991 | 3811            | 16952 | 0.9    | 4489 | 19968 |
| 1500              | 457    | 0.218  | 324   | 0.780    | 19.8 | 4874 | 21682 | 4084            | 18167 | 0.9    | 4818 | 21432 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC LIGHT LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>216 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.202  | 301   | 0.780    | 19.8 | 854  | 3797  | 253             | 1125  | 0.8    | 353  | 1570  |
| 200               | 61     | 0.202  | 301   | 0.780    | 19.8 | 854  | 3797  | 505             | 2246  | 0.9    | 635  | 2825  |
| 300               | 91     | 0.202  | 301   | 0.780    | 19.8 | 913  | 4060  | 758             | 3372  | 0.9    | 911  | 4052  |
| 400               | 122    | 0.202  | 301   | 0.780    | 19.8 | 1250 | 5561  | 1011            | 4497  | 0.9    | 1219 | 5422  |
| 500               | 152    | 0.202  | 301   | 0.780    | 19.8 | 1630 | 7252  | 1264            | 5623  | 0.9    | 1533 | 6819  |
| 600               | 183    | 0.202  | 301   | 0.780    | 19.8 | 1884 | 8380  | 1517            | 6748  | 0.9    | 1831 | 8145  |
| 700               | 213    | 0.211  | 313   | 0.795    | 20.2 | 2264 | 10071 | 1843            | 8198  | 0.9    | 2208 | 9822  |
| 800               | 244    | 0.211  | 313   | 0.795    | 20.2 | 2517 | 11198 | 2106            | 9368  | 0.9    | 2516 | 11192 |
| 900               | 274    | 0.211  | 314   | 0.795    | 20.2 | 2898 | 12889 | 2371            | 10547 | 0.9    | 2839 | 12629 |
| 1000              | 305    | 0.211  | 314   | 0.795    | 20.2 | 3151 | 14017 | 2634            | 11717 | 0.9    | 3147 | 13999 |
| 1100              | 335    | 0.211  | 314   | 0.795    | 20.2 | 3531 | 15708 | 2899            | 12895 | 0.9    | 3470 | 15435 |
| 1200              | 366    | 0.211  | 314   | 0.795    | 20.2 | 3785 | 16835 | 3163            | 14070 | 0.9    | 3778 | 16805 |
| 1300              | 396    | 0.219  | 326   | 0.811    | 20.6 | 4292 | 19090 | 3564            | 15853 | 0.9    | 4238 | 18852 |
| 1400              | 427    | 0.220  | 327   | 0.811    | 20.6 | 4689 | 20857 | 3845            | 17103 | 0.9    | 4577 | 20360 |
| 1500              | 457    | 0.220  | 327   | 0.811    | 20.6 | 5069 | 22548 | 4121            | 18331 | 0.9    | 4909 | 21836 |
| <b>288 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 323             | 1439  | 0.8    | 444  | 1975  |
| 200               | 61     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 647             | 2878  | 0.9    | 802  | 3569  |
| 300               | 91     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 970             | 4317  | 0.9    | 1146 | 5096  |
| 400               | 122    | 0.259  | 385   | 0.890    | 22.6 | 1566 | 6964  | 1294            | 5757  | 0.9    | 1511 | 6723  |
| 500               | 152    | 0.259  | 385   | 0.890    | 22.6 | 2072 | 9219  | 1618            | 7198  | 0.9    | 1901 | 8457  |
| 600               | 183    | 0.259  | 385   | 0.890    | 22.6 | 2326 | 10346 | 1942            | 8639  | 0.9    | 2265 | 10077 |
| 700               | 213    | 0.259  | 385   | 0.890    | 22.6 | 2706 | 12037 | 2267            | 10082 | 0.9    | 2643 | 11755 |
| 800               | 244    | 0.259  | 386   | 0.890    | 22.6 | 3086 | 13728 | 2591            | 11525 | 0.9    | 3020 | 13434 |
| 900               | 274    | 0.269  | 400   | 0.906    | 23.0 | 3593 | 15983 | 3023            | 13447 | 0.9    | 3507 | 15602 |
| 1000              | 305    | 0.269  | 400   | 0.906    | 23.0 | 3973 | 17674 | 3360            | 14945 | 0.9    | 3896 | 17330 |
| 1100              | 335    | 0.269  | 400   | 0.906    | 23.0 | 4354 | 19365 | 3697            | 16444 | 0.9    | 4284 | 19058 |
| 1200              | 366    | 0.269  | 400   | 0.906    | 23.0 | 4734 | 21056 | 4034            | 17943 | 0.9    | 4673 | 20787 |
| 1300              | 396    | 0.268  | 399   | 0.921    | 23.4 | 5069 | 22548 | 4354            | 19368 | 0.9    | 5062 | 22516 |
| 1400              | 427    | 0.268  | 399   | 0.921    | 23.4 | 5576 | 24803 | 4691            | 20865 | 0.9    | 5464 | 24307 |
| 1500              | 457    | 0.268  | 399   | 0.921    | 23.4 | 5956 | 26494 | 5027            | 22361 | 0.9    | 5854 | 26039 |
| <b>432 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 373             | 1658  | 0.8    | 487  | 2168  |
| 200               | 61     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 745             | 3316  | 0.9    | 890  | 3959  |
| 300               | 91     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 1118            | 4974  | 0.9    | 1279 | 5689  |
| 400               | 122    | 0.298  | 444   | 0.953    | 24.2 | 1756 | 7810  | 1491            | 6634  | 0.9    | 1708 | 7598  |
| 500               | 152    | 0.298  | 444   | 0.953    | 24.2 | 2326 | 10346 | 1865            | 8295  | 0.9    | 2148 | 9554  |
| 600               | 183    | 0.298  | 444   | 0.953    | 24.2 | 2579 | 11474 | 2238            | 9956  | 0.9    | 2558 | 11379 |
| 700               | 213    | 0.299  | 444   | 0.953    | 24.2 | 3086 | 13728 | 2612            | 11619 | 0.9    | 2992 | 13310 |
| 800               | 244    | 0.299  | 444   | 0.953    | 24.2 | 3466 | 15419 | 2986            | 13281 | 0.9    | 3415 | 15189 |
| 900               | 274    | 0.309  | 459   | 0.969    | 24.6 | 3973 | 17674 | 3473            | 15448 | 0.9    | 3952 | 17580 |
| 1000              | 305    | 0.309  | 460   | 0.969    | 24.6 | 4480 | 19929 | 3860            | 17170 | 0.9    | 4398 | 19564 |
| 1100              | 335    | 0.309  | 460   | 0.969    | 24.6 | 4860 | 21620 | 4247            | 18891 | 0.9    | 4832 | 21496 |
| 1200              | 366    | 0.320  | 476   | 0.984    | 25.0 | 5449 | 24239 | 4796            | 21333 | 0.9    | 5433 | 24168 |
| 1300              | 396    | 0.320  | 476   | 0.984    | 25.0 | 5956 | 26494 | 5197            | 23118 | 0.9    | 5892 | 26208 |
| 1400              | 427    | 0.319  | 474   | 0.984    | 25.0 | 6336 | 28185 | 5576            | 24804 | 0.9    | 6321 | 28118 |
| 1500              | 457    | 0.319  | 474   | 0.984    | 25.0 | 6970 | 31003 | 5977            | 26585 | 0.9    | 6791 | 30207 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC MEDIUM LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |      |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |      | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N    | SAG %  | LBS  | N     |
| <b>12 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 100             | 446  | 2.3    | 242  | 1074  |
| 200              | 61     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 201             | 892  | 2.8    | 406  | 1807  |
| 300              | 91     | 0.080  | 119   | 0.500    | 12.7 | 598  | 2661  | 301             | 1339 | 0.9    | 518  | 2304  |
| 400              | 122    | 0.080  | 119   | 0.500    | 12.7 | 746  | 3320  | 401             | 1785 | 3.0    | 744  | 3311  |
| 500              | 152    | 0.080  | 120   | 0.500    | 12.7 | 999  | 4444  | 502             | 2232 | 3.0    | 946  | 4206  |
| 600              | 183    | 0.084  | 125   | 0.512    | 13.0 | 1189 | 5290  | 632             | 2812 | 0.9    | 1055 | 4694  |
| 700              | 213    | 0.084  | 126   | 0.512    | 13.0 | 1569 | 6981  | 738             | 3283 | 2.9    | 1387 | 6168  |
| 800              | 244    | 0.084  | 126   | 0.512    | 13.0 | 1569 | 6981  | 844             | 3752 | 3.0    | 1536 | 6834  |
| 900              | 274    | 0.085  | 126   | 0.512    | 13.0 | 1823 | 8108  | 951             | 4231 | 3.0    | 1742 | 7751  |
| 1000             | 305    | 0.090  | 134   | 0.528    | 13.4 | 2076 | 9236  | 1125            | 5005 | 1.0    | 1825 | 8118  |
| 1100             | 335    | 0.090  | 134   | 0.528    | 13.4 | 2203 | 9799  | 1238            | 5506 | 3.0    | 2180 | 9698  |
| 1200             | 366    | 0.090  | 134   | 0.528    | 13.4 | 2456 | 10927 | 1351            | 6010 | 2.9    | 2391 | 10634 |
| 1300             | 396    | 0.090  | 134   | 0.528    | 13.4 | 2583 | 11490 | 1464            | 6512 | 3.0    | 2573 | 11444 |
| 1400             | 427    | 0.090  | 134   | 0.528    | 13.4 | 2837 | 12618 | 1577            | 7016 | 3.0    | 2783 | 12380 |
| 1500             | 457    | 0.090  | 134   | 0.528    | 13.4 | 3090 | 13745 | 1691            | 7520 | 2.9    | 2994 | 13316 |
| <b>24 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 102             | 452  | 2.3    | 242  | 1078  |
| 200              | 61     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 203             | 904  | 2.8    | 408  | 1813  |
| 300              | 91     | 0.081  | 121   | 0.500    | 12.7 | 598  | 2661  | 305             | 1356 | 0.9    | 520  | 2314  |
| 400              | 122    | 0.081  | 121   | 0.500    | 12.7 | 776  | 3452  | 407             | 1809 | 3.0    | 754  | 3355  |
| 500              | 152    | 0.081  | 121   | 0.500    | 12.7 | 999  | 4444  | 508             | 2262 | 3.0    | 950  | 4224  |
| 600              | 183    | 0.085  | 127   | 0.512    | 13.0 | 1189 | 5290  | 640             | 2847 | 0.9    | 1060 | 4714  |
| 700              | 213    | 0.085  | 127   | 0.512    | 13.0 | 1569 | 6981  | 747             | 3324 | 2.9    | 1392 | 6192  |
| 800              | 244    | 0.085  | 127   | 0.512    | 13.0 | 1696 | 7545  | 854             | 3800 | 2.9    | 1571 | 6986  |
| 900              | 274    | 0.086  | 127   | 0.512    | 13.0 | 1823 | 8108  | 963             | 4284 | 3.0    | 1750 | 7782  |
| 1000             | 305    | 0.091  | 136   | 0.528    | 13.4 | 2076 | 9236  | 1138            | 5064 | 1.0    | 1833 | 8152  |
| 1100             | 335    | 0.091  | 136   | 0.528    | 13.4 | 2203 | 9799  | 1252            | 5571 | 3.0    | 2189 | 9737  |
| 1200             | 366    | 0.091  | 136   | 0.528    | 13.4 | 2456 | 10927 | 1367            | 6080 | 2.9    | 2400 | 10676 |
| 1300             | 396    | 0.091  | 136   | 0.528    | 13.4 | 2583 | 11490 | 1481            | 6588 | 3.0    | 2583 | 11490 |
| 1400             | 427    | 0.091  | 136   | 0.528    | 13.4 | 2837 | 12618 | 1596            | 7098 | 2.9    | 2794 | 12430 |
| 1500             | 457    | 0.091  | 136   | 0.528    | 13.4 | 3090 | 13745 | 1710            | 7608 | 2.9    | 3006 | 13369 |
| <b>36 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.082  | 123   | 0.500    | 12.7 | 539  | 2398  | 103             | 458  | 2.3    | 243  | 1081  |
| 200              | 61     | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 206             | 916  | 2.7    | 420  | 1868  |
| 300              | 91     | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 309             | 1375 | 3.0    | 572  | 2544  |
| 400              | 122    | 0.082  | 123   | 0.500    | 12.7 | 776  | 3452  | 412             | 1833 | 3.0    | 757  | 3367  |
| 500              | 152    | 0.082  | 123   | 0.500    | 12.7 | 999  | 4444  | 515             | 2291 | 3.0    | 953  | 4239  |
| 600              | 183    | 0.086  | 129   | 0.512    | 13.0 | 1189 | 5290  | 648             | 2882 | 3.0    | 1164 | 5178  |
| 700              | 213    | 0.086  | 129   | 0.512    | 13.0 | 1506 | 6699  | 756             | 3363 | 2.9    | 1384 | 6156  |
| 800              | 244    | 0.087  | 129   | 0.512    | 13.0 | 1823 | 8108  | 867             | 3857 | 2.9    | 1604 | 7135  |
| 900              | 274    | 0.087  | 129   | 0.512    | 13.0 | 1823 | 8108  | 975             | 4337 | 2.9    | 1757 | 7816  |
| 1000             | 305    | 0.092  | 137   | 0.528    | 13.4 | 2076 | 9236  | 1152            | 5124 | 2.9    | 2014 | 8959  |
| 1100             | 335    | 0.092  | 137   | 0.528    | 13.4 | 2456 | 10927 | 1268            | 5640 | 2.9    | 2252 | 10017 |
| 1200             | 366    | 0.092  | 137   | 0.528    | 13.4 | 2456 | 10927 | 1383            | 6152 | 2.9    | 2410 | 10720 |
| 1300             | 396    | 0.092  | 137   | 0.528    | 13.4 | 2710 | 12054 | 1499            | 6668 | 2.9    | 2621 | 11659 |
| 1400             | 427    | 0.092  | 137   | 0.528    | 13.4 | 2837 | 12618 | 1614            | 7179 | 2.9    | 2806 | 12482 |
| 1500             | 457    | 0.092  | 137   | 0.528    | 13.4 | 3090 | 13745 | 1730            | 7695 | 2.9    | 3017 | 13420 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC MEDIUM LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |      |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |      | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N    | SAG %  | LBS  | N     |
| <b>48 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.083  | 124   | 0.500    | 12.7 | 539  | 2398  | 104             | 463  | 2.3    | 244  | 1085  |
| 200              | 61     | 0.083  | 124   | 0.500    | 12.7 | 598  | 2661  | 209             | 930  | 2.7    | 421  | 1873  |
| 300              | 91     | 0.083  | 124   | 0.500    | 12.7 | 598  | 2661  | 313             | 1392 | 3.0    | 574  | 2553  |
| 400              | 122    | 0.083  | 124   | 0.500    | 12.7 | 776  | 3452  | 417             | 1855 | 3.0    | 761  | 3385  |
| 500              | 152    | 0.083  | 124   | 0.500    | 12.7 | 999  | 4444  | 522             | 2322 | 3.0    | 957  | 4257  |
| 600              | 183    | 0.087  | 130   | 0.512    | 13.0 | 1189 | 5290  | 656             | 2918 | 3.0    | 1169 | 5200  |
| 700              | 213    | 0.088  | 130   | 0.512    | 13.0 | 1506 | 6699  | 766             | 3407 | 2.9    | 1390 | 6183  |
| 800              | 244    | 0.088  | 131   | 0.512    | 13.0 | 1823 | 8108  | 877             | 3901 | 2.9    | 1610 | 7162  |
| 900              | 274    | 0.088  | 131   | 0.512    | 13.0 | 1823 | 8108  | 987             | 4390 | 2.9    | 1764 | 7847  |
| 1000             | 305    | 0.093  | 139   | 0.528    | 13.4 | 2076 | 9236  | 1165            | 5182 | 1.0    | 1848 | 8220  |
| 1100             | 335    | 0.093  | 139   | 0.528    | 13.4 | 2456 | 10927 | 1282            | 5703 | 2.9    | 2261 | 10057 |
| 1200             | 366    | 0.093  | 139   | 0.528    | 13.4 | 2456 | 10927 | 1399            | 6223 | 2.9    | 2419 | 10760 |
| 1300             | 396    | 0.093  | 139   | 0.528    | 13.4 | 2710 | 12054 | 1516            | 6744 | 2.9    | 2632 | 11708 |
| 1400             | 427    | 0.093  | 139   | 0.528    | 13.4 | 2963 | 13182 | 1633            | 7264 | 2.9    | 2844 | 12651 |
| 1500             | 457    | 0.093  | 139   | 0.528    | 13.4 | 3090 | 13745 | 1750            | 7784 | 2.9    | 3029 | 13474 |
| <b>60 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 106             | 472  | 2.3    | 244  | 1085  |
| 200              | 61     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 211             | 939  | 2.8    | 412  | 1833  |
| 300              | 91     | 0.084  | 126   | 0.500    | 12.7 | 598  | 2661  | 317             | 1410 | 3.0    | 576  | 2562  |
| 400              | 122    | 0.085  | 126   | 0.500    | 12.7 | 776  | 3452  | 423             | 1882 | 3.0    | 764  | 3398  |
| 500              | 152    | 0.085  | 126   | 0.500    | 12.7 | 999  | 4444  | 528             | 2349 | 3.0    | 961  | 4275  |
| 600              | 183    | 0.089  | 132   | 0.512    | 13.0 | 1189 | 5290  | 664             | 2954 | 3.0    | 1174 | 5222  |
| 700              | 213    | 0.089  | 132   | 0.512    | 13.0 | 1379 | 6135  | 775             | 3447 | 3.0    | 1368 | 6085  |
| 800              | 244    | 0.089  | 132   | 0.512    | 13.0 | 1569 | 6981  | 886             | 3941 | 3.0    | 1562 | 6948  |
| 900              | 274    | 0.089  | 132   | 0.512    | 13.0 | 1823 | 8108  | 999             | 4444 | 2.9    | 1771 | 7878  |
| 1000             | 305    | 0.094  | 140   | 0.528    | 13.4 | 2076 | 9236  | 1178            | 5240 | 2.9    | 2030 | 9030  |
| 1100             | 335    | 0.094  | 140   | 0.528    | 13.4 | 2330 | 10363 | 1296            | 5765 | 2.9    | 2243 | 9977  |
| 1200             | 366    | 0.094  | 140   | 0.528    | 13.4 | 2456 | 10927 | 1414            | 6290 | 2.9    | 2429 | 10805 |
| 1300             | 396    | 0.094  | 140   | 0.528    | 13.4 | 2710 | 12054 | 1533            | 6819 | 2.9    | 2642 | 11752 |
| 1400             | 427    | 0.094  | 140   | 0.528    | 13.4 | 2963 | 13182 | 1652            | 7348 | 2.9    | 2856 | 12704 |
| 1500             | 457    | 0.094  | 140   | 0.528    | 13.4 | 3090 | 13745 | 1770            | 7873 | 2.9    | 3042 | 13531 |
| <b>72 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 125             | 556  | 2.1    | 290  | 1290  |
| 200              | 61     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 249             | 1108 | 2.5    | 489  | 2175  |
| 300              | 91     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 374             | 1664 | 2.7    | 668  | 2971  |
| 400              | 122    | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 499             | 2220 | 2.9    | 836  | 3719  |
| 500              | 152    | 0.100  | 149   | 0.535    | 13.6 | 1061 | 4719  | 624             | 2776 | 2.9    | 1044 | 4644  |
| 600              | 183    | 0.108  | 161   | 0.559    | 14.2 | 1314 | 5843  | 813             | 3616 | 2.9    | 1310 | 5827  |
| 700              | 213    | 0.108  | 161   | 0.559    | 14.2 | 1567 | 6970  | 949             | 4221 | 2.9    | 1536 | 6832  |
| 800              | 244    | 0.108  | 161   | 0.559    | 14.2 | 1884 | 8380  | 1085            | 4826 | 2.8    | 1775 | 7896  |
| 900              | 274    | 0.109  | 161   | 0.559    | 14.2 | 2011 | 8943  | 1221            | 5431 | 2.9    | 1975 | 8785  |
| 1000             | 305    | 0.109  | 162   | 0.559    | 14.2 | 2264 | 10071 | 1357            | 6036 | 2.8    | 2201 | 9791  |
| 1100             | 335    | 0.109  | 162   | 0.559    | 14.2 | 2517 | 11198 | 1495            | 6650 | 2.8    | 2428 | 10800 |
| 1200             | 366    | 0.109  | 162   | 0.559    | 14.2 | 2644 | 11762 | 1631            | 7255 | 2.9    | 2628 | 11690 |
| 1300             | 396    | 0.109  | 162   | 0.559    | 14.2 | 2898 | 12889 | 1768            | 7864 | 2.9    | 2854 | 12695 |
| 1400             | 427    | 0.109  | 162   | 0.559    | 14.2 | 3151 | 14017 | 1905            | 8474 | 2.8    | 3080 | 13701 |
| 1500             | 457    | 0.115  | 171   | 0.575    | 14.6 | 3405 | 15144 | 2153            | 9577 | 2.8    | 3392 | 15088 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC MEDIUM LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>84 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 164             | 730   | 1.9    | 354  | 1575  |
| 200               | 61     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 328             | 1459  | 2.3    | 602  | 2678  |
| 300               | 91     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 492             | 2189  | 2.5    | 826  | 3674  |
| 400               | 122    | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 656             | 2918  | 2.6    | 1037 | 4613  |
| 500               | 152    | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 820             | 3648  | 2.7    | 1240 | 5516  |
| 600               | 183    | 0.131  | 195   | 0.610    | 15.5 | 1473 | 6554  | 984             | 4377  | 2.8    | 1473 | 6552  |
| 700               | 213    | 0.131  | 195   | 0.610    | 15.5 | 1756 | 7810  | 1149            | 5111  | 2.8    | 1726 | 7678  |
| 800               | 244    | 0.131  | 195   | 0.610    | 15.5 | 2009 | 8937  | 1313            | 5841  | 2.8    | 1973 | 8776  |
| 900               | 274    | 0.138  | 205   | 0.626    | 15.9 | 2326 | 10346 | 1552            | 6904  | 2.7    | 2291 | 10191 |
| 1000              | 305    | 0.138  | 205   | 0.626    | 15.9 | 2579 | 11474 | 1725            | 7673  | 2.7    | 2545 | 11321 |
| 1100              | 335    | 0.138  | 205   | 0.626    | 15.9 | 2833 | 12601 | 1898            | 8443  | 2.7    | 2799 | 12451 |
| 1200              | 366    | 0.138  | 206   | 0.626    | 15.9 | 3086 | 13728 | 2072            | 9217  | 2.7    | 3053 | 13580 |
| 1300              | 396    | 0.138  | 206   | 0.626    | 15.9 | 3340 | 14856 | 2245            | 9986  | 2.7    | 3307 | 14710 |
| 1400              | 427    | 0.138  | 206   | 0.626    | 15.9 | 3593 | 15983 | 2418            | 10756 | 2.7    | 3562 | 15845 |
| 1500              | 457    | 0.145  | 216   | 0.642    | 16.3 | 3973 | 17674 | 2716            | 12081 | 2.7    | 3938 | 17517 |
| <b>96 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 165             | 734   | 1.9    | 354  | 1575  |
| 200               | 61     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 331             | 1472  | 2.3    | 604  | 2687  |
| 300               | 91     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 496             | 2206  | 2.5    | 829  | 3688  |
| 400               | 122    | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 661             | 2940  | 2.6    | 1041 | 4631  |
| 500               | 152    | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 827             | 3679  | 2.7    | 1245 | 5538  |
| 600               | 183    | 0.132  | 197   | 0.610    | 15.5 | 1503 | 6685  | 992             | 4413  | 2.8    | 1484 | 6601  |
| 700               | 213    | 0.132  | 197   | 0.610    | 15.5 | 1756 | 7810  | 1158            | 5151  | 2.8    | 1732 | 7704  |
| 800               | 244    | 0.132  | 197   | 0.610    | 15.5 | 2009 | 8937  | 1324            | 5889  | 2.8    | 1980 | 8807  |
| 900               | 274    | 0.139  | 207   | 0.626    | 15.9 | 2326 | 10346 | 1564            | 6957  | 2.7    | 2299 | 10226 |
| 1000              | 305    | 0.139  | 207   | 0.626    | 15.9 | 2706 | 12037 | 1739            | 7735  | 2.7    | 2577 | 11463 |
| 1100              | 335    | 0.139  | 207   | 0.626    | 15.9 | 2833 | 12601 | 1913            | 8509  | 2.7    | 2809 | 12495 |
| 1200              | 366    | 0.139  | 207   | 0.626    | 15.9 | 3086 | 13728 | 2088            | 9288  | 2.7    | 3064 | 13629 |
| 1300              | 396    | 0.139  | 207   | 0.626    | 15.9 | 3340 | 14856 | 2262            | 10062 | 2.7    | 3319 | 14764 |
| 1400              | 427    | 0.139  | 207   | 0.626    | 15.9 | 3593 | 15983 | 2437            | 10840 | 2.7    | 3574 | 15898 |
| 1500              | 457    | 0.146  | 217   | 0.642    | 16.3 | 3973 | 17674 | 2737            | 12175 | 2.7    | 3952 | 17579 |
| <b>108 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 213             | 947   | 1.8    | 436  | 1939  |
| 200               | 61     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 426             | 1895  | 2.0    | 748  | 3327  |
| 300               | 91     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 639             | 2842  | 2.2    | 1030 | 4582  |
| 400               | 122    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 852             | 3790  | 2.4    | 1297 | 5769  |
| 500               | 152    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1065            | 4737  | 2.5    | 1554 | 6913  |
| 600               | 183    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1278            | 5685  | 2.5    | 1805 | 8029  |
| 700               | 213    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1491            | 6632  | 2.6    | 2050 | 9119  |
| 800               | 244    | 0.170  | 254   | 0.685    | 17.4 | 2340 | 10408 | 1704            | 7580  | 2.6    | 2339 | 10404 |
| 900               | 274    | 0.178  | 265   | 0.701    | 17.8 | 2720 | 12099 | 2000            | 8896  | 2.6    | 2713 | 12068 |
| 1000              | 305    | 0.178  | 265   | 0.701    | 17.8 | 3100 | 13790 | 2225            | 9897  | 2.6    | 3029 | 13474 |
| 1100              | 335    | 0.178  | 265   | 0.701    | 17.8 | 3354 | 14918 | 2448            | 10889 | 2.6    | 3323 | 14781 |
| 1200              | 366    | 0.178  | 265   | 0.701    | 17.8 | 3734 | 16609 | 2671            | 11881 | 2.6    | 3638 | 16183 |
| 1300              | 396    | 0.178  | 265   | 0.701    | 17.8 | 3987 | 17736 | 2894            | 12873 | 2.6    | 3933 | 17495 |
| 1400              | 427    | 0.186  | 276   | 0.717    | 18.2 | 4367 | 19427 | 3248            | 14448 | 2.6    | 4355 | 19372 |
| 1500              | 457    | 0.186  | 276   | 0.717    | 18.2 | 4748 | 21118 | 3481            | 15484 | 2.6    | 4678 | 20809 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NEC MEDIUM LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>120 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 214             | 952   | 1.8    | 437  | 1944  |
| 200               | 61     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 429             | 1908  | 2.0    | 749  | 3332  |
| 300               | 91     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 643             | 2860  | 2.2    | 1033 | 4595  |
| 400               | 122    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 857             | 3812  | 2.4    | 1301 | 5787  |
| 500               | 152    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1072            | 4768  | 2.5    | 1559 | 6935  |
| 600               | 183    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1286            | 5720  | 2.5    | 1810 | 8051  |
| 700               | 213    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1501            | 6677  | 2.6    | 2057 | 9150  |
| 800               | 244    | 0.179  | 266   | 0.701    | 17.8 | 2467 | 10972 | 1788            | 7953  | 2.6    | 2427 | 10796 |
| 900               | 274    | 0.179  | 266   | 0.701    | 17.8 | 2783 | 12381 | 2012            | 8950  | 2.6    | 2732 | 12153 |
| 1000              | 305    | 0.179  | 266   | 0.701    | 17.8 | 3100 | 13790 | 2238            | 9955  | 2.6    | 3039 | 13518 |
| 1100              | 335    | 0.179  | 267   | 0.701    | 17.8 | 3354 | 14918 | 2463            | 10956 | 2.6    | 3334 | 14830 |
| 1200              | 366    | 0.179  | 267   | 0.701    | 17.8 | 3734 | 16609 | 2687            | 11952 | 2.6    | 3650 | 16236 |
| 1300              | 396    | 0.179  | 267   | 0.701    | 17.8 | 4114 | 18300 | 2912            | 12953 | 2.6    | 3966 | 17642 |
| 1400              | 427    | 0.187  | 278   | 0.717    | 18.2 | 4621 | 20554 | 3267            | 14532 | 2.5    | 4409 | 19612 |
| 1500              | 457    | 0.187  | 278   | 0.717    | 18.2 | 4748 | 21118 | 3501            | 15573 | 2.6    | 4693 | 20876 |
| <b>132 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 260             | 1157  | 1.8    | 476  | 2117  |
| 200               | 61     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 520             | 2313  | 2.1    | 826  | 3674  |
| 300               | 91     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 780             | 3470  | 2.2    | 1146 | 5098  |
| 400               | 122    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1040            | 4626  | 2.3    | 1451 | 6454  |
| 500               | 152    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1300            | 5783  | 2.4    | 1748 | 7775  |
| 600               | 183    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1560            | 6939  | 2.5    | 2038 | 9065  |
| 700               | 213    | 0.208  | 310   | 0.764    | 19.4 | 2467 | 10972 | 1821            | 8100  | 2.5    | 2386 | 10613 |
| 800               | 244    | 0.208  | 310   | 0.764    | 19.4 | 2720 | 12099 | 2081            | 9257  | 2.5    | 2712 | 12064 |
| 900               | 274    | 0.216  | 322   | 0.780    | 19.8 | 3227 | 14354 | 2433            | 10823 | 2.5    | 3153 | 14025 |
| 1000              | 305    | 0.216  | 322   | 0.780    | 19.8 | 3607 | 16045 | 2704            | 12028 | 2.5    | 3507 | 15600 |
| 1100              | 335    | 0.217  | 322   | 0.780    | 19.8 | 3860 | 17172 | 2978            | 13247 | 2.5    | 3844 | 17099 |
| 1200              | 366    | 0.217  | 322   | 0.780    | 19.8 | 4241 | 18863 | 3249            | 14452 | 2.5    | 4198 | 18674 |
| 1300              | 396    | 0.217  | 322   | 0.780    | 19.8 | 4621 | 20554 | 3521            | 15662 | 2.5    | 4553 | 20253 |
| 1400              | 427    | 0.217  | 323   | 0.780    | 19.8 | 5001 | 22246 | 3793            | 16872 | 2.5    | 4908 | 21832 |
| 1500              | 457    | 0.225  | 335   | 0.795    | 20.2 | 5508 | 24500 | 4220            | 18771 | 2.4    | 5411 | 24069 |
| <b>144 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 261             | 1161  | 1.8    | 477  | 2122  |
| 200               | 61     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 523             | 2326  | 2.1    | 827  | 3679  |
| 300               | 91     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 784             | 3487  | 2.2    | 1149 | 5111  |
| 400               | 122    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1046            | 4653  | 2.3    | 1455 | 6472  |
| 500               | 152    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1307            | 5814  | 2.4    | 1753 | 7798  |
| 600               | 183    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1568            | 6975  | 2.5    | 2044 | 9092  |
| 700               | 213    | 0.209  | 311   | 0.764    | 19.4 | 2467 | 10972 | 1830            | 8140  | 2.5    | 2393 | 10645 |
| 800               | 244    | 0.209  | 311   | 0.764    | 19.4 | 2783 | 12381 | 2093            | 9310  | 2.5    | 2730 | 12144 |
| 900               | 274    | 0.217  | 324   | 0.780    | 19.8 | 3227 | 14354 | 2446            | 10880 | 2.5    | 3162 | 14065 |
| 1000              | 305    | 0.217  | 324   | 0.780    | 19.8 | 3607 | 16045 | 2718            | 12090 | 2.5    | 3517 | 15644 |
| 1100              | 335    | 0.218  | 324   | 0.780    | 19.8 | 3860 | 17172 | 2993            | 13314 | 2.5    | 3855 | 17148 |
| 1200              | 366    | 0.218  | 324   | 0.780    | 19.8 | 4241 | 18863 | 3266            | 14528 | 2.5    | 4211 | 18731 |
| 1300              | 396    | 0.218  | 324   | 0.780    | 19.8 | 4621 | 20554 | 3539            | 15742 | 2.5    | 4566 | 20311 |
| 1400              | 427    | 0.218  | 324   | 0.780    | 19.8 | 5001 | 22246 | 3812            | 16957 | 2.5    | 4922 | 21894 |
| 1500              | 457    | 0.226  | 337   | 0.795    | 20.2 | 5508 | 24500 | 4241            | 18865 | 2.4    | 5427 | 24140 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NEC MEDIUM LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>216 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.202  | 301   | 0.780    | 19.8 | 854  | 3797  | 253             | 1125  | 2.1    | 394  | 1753  |
| 200               | 61     | 0.202  | 301   | 0.780    | 19.8 | 854  | 3797  | 505             | 2246  | 2.4    | 694  | 3087  |
| 300               | 91     | 0.202  | 301   | 0.780    | 19.8 | 1002 | 4455  | 758             | 3372  | 2.5    | 1000 | 4448  |
| 400               | 122    | 0.202  | 301   | 0.780    | 19.8 | 1377 | 6125  | 1011            | 4497  | 2.5    | 1341 | 5965  |
| 500               | 152    | 0.202  | 301   | 0.780    | 19.8 | 1884 | 8380  | 1264            | 5623  | 2.5    | 1701 | 7566  |
| 600               | 183    | 0.202  | 301   | 0.780    | 19.8 | 2011 | 8943  | 1518            | 6752  | 2.5    | 2003 | 8910  |
| 700               | 213    | 0.211  | 313   | 0.795    | 20.2 | 2517 | 11198 | 1843            | 8198  | 2.5    | 2423 | 10778 |
| 800               | 244    | 0.211  | 314   | 0.795    | 20.2 | 2771 | 12326 | 2107            | 9372  | 2.5    | 2754 | 12250 |
| 900               | 274    | 0.211  | 314   | 0.795    | 20.2 | 3151 | 14017 | 2371            | 10547 | 2.5    | 3104 | 13807 |
| 1000              | 305    | 0.211  | 314   | 0.795    | 20.2 | 3658 | 16271 | 2636            | 11726 | 2.5    | 3473 | 15449 |
| 1100              | 335    | 0.211  | 314   | 0.795    | 20.2 | 3785 | 16835 | 2899            | 12895 | 2.5    | 3784 | 16832 |
| 1200              | 366    | 0.219  | 326   | 0.811    | 20.6 | 4292 | 19090 | 3290            | 14635 | 2.5    | 4259 | 18945 |
| 1300              | 396    | 0.220  | 327   | 0.811    | 20.6 | 4689 | 20857 | 3570            | 15880 | 2.5    | 4624 | 20569 |
| 1400              | 427    | 0.220  | 327   | 0.811    | 20.6 | 5069 | 22548 | 3846            | 17108 | 2.5    | 4984 | 22170 |
| 1500              | 457    | 0.220  | 327   | 0.811    | 20.6 | 5576 | 24803 | 4125            | 18349 | 2.5    | 5364 | 23860 |
| <b>288 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 323             | 1439  | 2.0    | 488  | 2172  |
| 200               | 61     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 647             | 2878  | 2.2    | 866  | 3851  |
| 300               | 91     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 970             | 4317  | 2.4    | 1222 | 5437  |
| 400               | 122    | 0.259  | 385   | 0.890    | 22.6 | 1692 | 7528  | 1294            | 5757  | 2.4    | 1625 | 7229  |
| 500               | 152    | 0.259  | 385   | 0.890    | 22.6 | 2072 | 9219  | 1618            | 7198  | 2.4    | 2026 | 9013  |
| 600               | 183    | 0.259  | 385   | 0.890    | 22.6 | 2579 | 11474 | 1943            | 8641  | 2.4    | 2444 | 10872 |
| 700               | 213    | 0.259  | 386   | 0.890    | 22.6 | 2833 | 12601 | 2267            | 10083 | 2.4    | 2828 | 12580 |
| 800               | 244    | 0.259  | 386   | 0.890    | 22.6 | 3340 | 14856 | 2593            | 11534 | 2.4    | 3248 | 14447 |
| 900               | 274    | 0.269  | 400   | 0.906    | 23.0 | 3847 | 17111 | 3024            | 13450 | 2.4    | 3757 | 16710 |
| 1000              | 305    | 0.269  | 400   | 0.906    | 23.0 | 4227 | 18802 | 3360            | 14948 | 2.4    | 4168 | 18542 |
| 1100              | 335    | 0.269  | 400   | 0.906    | 23.0 | 4734 | 21056 | 3698            | 16448 | 2.4    | 4597 | 20450 |
| 1200              | 366    | 0.268  | 399   | 0.921    | 23.4 | 5069 | 22548 | 4019            | 17879 | 2.4    | 5002 | 22252 |
| 1300              | 396    | 0.268  | 399   | 0.921    | 23.4 | 5449 | 24239 | 4355            | 19373 | 2.4    | 5415 | 24085 |
| 1400              | 427    | 0.268  | 399   | 0.921    | 23.4 | 5829 | 25930 | 4692            | 20869 | 2.4    | 5827 | 25918 |
| 1500              | 457    | 0.267  | 397   | 0.921    | 23.4 | 6336 | 28185 | 5005            | 22265 | 2.4    | 6239 | 27750 |
| <b>432 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 373             | 1658  | 2.0    | 529  | 2355  |
| 200               | 61     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 745             | 3316  | 2.2    | 949  | 4221  |
| 300               | 91     | 0.298  | 444   | 0.953    | 24.2 | 1384 | 6158  | 1118            | 4974  | 2.3    | 1360 | 6050  |
| 400               | 122    | 0.298  | 444   | 0.953    | 24.2 | 1819 | 8091  | 1491            | 6634  | 2.3    | 1811 | 8054  |
| 500               | 152    | 0.298  | 444   | 0.953    | 24.2 | 2326 | 10346 | 1865            | 8295  | 2.3    | 2270 | 10098 |
| 600               | 183    | 0.298  | 444   | 0.953    | 24.2 | 2833 | 12601 | 2238            | 9957  | 2.3    | 2730 | 12143 |
| 700               | 213    | 0.299  | 444   | 0.953    | 24.2 | 3340 | 14856 | 2612            | 11620 | 2.3    | 3190 | 14188 |
| 800               | 244    | 0.309  | 459   | 0.969    | 24.6 | 3973 | 17674 | 3087            | 13732 | 2.3    | 3752 | 16689 |
| 900               | 274    | 0.309  | 459   | 0.969    | 24.6 | 4227 | 18802 | 3473            | 15451 | 2.3    | 4192 | 18648 |
| 1000              | 305    | 0.309  | 460   | 0.969    | 24.6 | 4734 | 21056 | 3861            | 17172 | 2.3    | 4663 | 20744 |
| 1100              | 335    | 0.320  | 476   | 0.984    | 25.0 | 5322 | 23675 | 4396            | 19554 | 2.3    | 5273 | 23456 |
| 1200              | 366    | 0.320  | 476   | 0.984    | 25.0 | 5829 | 25930 | 4797            | 21338 | 2.3    | 5756 | 25605 |
| 1300              | 396    | 0.319  | 474   | 0.984    | 25.0 | 6336 | 28185 | 5178            | 23032 | 2.3    | 6223 | 27683 |
| 1400              | 427    | 0.319  | 474   | 0.984    | 25.0 | 6716 | 29876 | 5577            | 24809 | 2.3    | 6690 | 29760 |
| 1500              | 457    | 0.319  | 474   | 0.984    | 25.0 | 7223 | 32131 | 5977            | 26589 | 2.3    | 7173 | 31906 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC HEAVY LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |      |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |      | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N    | SAG %  | LBS  | N     |
| <b>12 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.080  | 119   | 0.500    | 12.7 | 539  | 2398  | 100             | 446  | 3.5    | 335  | 1492  |
| 200              | 61     | 0.080  | 119   | 0.500    | 12.7 | 598  | 2661  | 201             | 892  | 4.1    | 569  | 2533  |
| 300              | 91     | 0.080  | 119   | 0.500    | 12.7 | 936  | 4162  | 301             | 1339 | 4.1    | 864  | 3844  |
| 400              | 122    | 0.084  | 125   | 0.512    | 13.0 | 1189 | 5290  | 421             | 1875 | 4.2    | 1152 | 5125  |
| 500              | 152    | 0.084  | 126   | 0.512    | 13.0 | 1506 | 6699  | 527             | 2345 | 4.1    | 1445 | 6429  |
| 600              | 183    | 0.085  | 126   | 0.512    | 13.0 | 1823 | 8108  | 634             | 2821 | 4.1    | 1739 | 7737  |
| 700              | 213    | 0.090  | 134   | 0.528    | 13.4 | 2076 | 9236  | 788             | 3503 | 4.1    | 2052 | 9127  |
| 800              | 244    | 0.090  | 134   | 0.528    | 13.4 | 2456 | 10927 | 901             | 4006 | 4.1    | 2367 | 10530 |
| 900              | 274    | 0.090  | 134   | 0.528    | 13.4 | 2710 | 12054 | 1014            | 4509 | 4.1    | 2649 | 11785 |
| 1000             | 305    | 0.090  | 134   | 0.528    | 13.4 | 2963 | 13182 | 1127            | 5012 | 4.1    | 2931 | 13040 |
| 1100             | 335    | 0.093  | 138   | 0.535    | 13.6 | 3344 | 14873 | 1278            | 5687 | 4.1    | 3276 | 14572 |
| 1200             | 366    | 0.093  | 138   | 0.535    | 13.6 | 3597 | 16000 | 1395            | 6207 | 4.1    | 3561 | 15839 |
| 1300             | 396    | 0.102  | 151   | 0.559    | 14.2 | 4104 | 18255 | 1652            | 7349 | 4.1    | 4017 | 17869 |
| 1400             | 427    | 0.102  | 152   | 0.559    | 14.2 | 4309 | 19166 | 1783            | 7933 | 4.1    | 4300 | 19125 |
| 1500             | 457    | 0.102  | 152   | 0.559    | 14.2 | 4689 | 20857 | 1915            | 8517 | 4.1    | 4628 | 20585 |
| <b>24 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.081  | 121   | 0.500    | 12.7 | 539  | 2398  | 102             | 452  | 3.5    | 336  | 1495  |
| 200              | 61     | 0.081  | 121   | 0.500    | 12.7 | 598  | 2661  | 203             | 904  | 4.1    | 571  | 2539  |
| 300              | 91     | 0.081  | 121   | 0.500    | 12.7 | 936  | 4162  | 305             | 1357 | 4.1    | 866  | 3853  |
| 400              | 122    | 0.085  | 127   | 0.512    | 13.0 | 1189 | 5290  | 427             | 1898 | 4.1    | 1155 | 5137  |
| 500              | 152    | 0.085  | 127   | 0.512    | 13.0 | 1506 | 6699  | 534             | 2374 | 4.1    | 1449 | 6445  |
| 600              | 183    | 0.086  | 127   | 0.512    | 13.0 | 1823 | 8108  | 642             | 2856 | 4.1    | 1743 | 7755  |
| 700              | 213    | 0.091  | 136   | 0.528    | 13.4 | 2076 | 9236  | 797             | 3545 | 4.1    | 2057 | 9149  |
| 800              | 244    | 0.091  | 136   | 0.528    | 13.4 | 2456 | 10927 | 911             | 4054 | 4.1    | 2373 | 10555 |
| 900              | 274    | 0.091  | 136   | 0.528    | 13.4 | 2837 | 12618 | 1026            | 4563 | 4.1    | 2689 | 11960 |
| 1000             | 305    | 0.091  | 136   | 0.528    | 13.4 | 2963 | 13182 | 1140            | 5071 | 4.1    | 2938 | 13071 |
| 1100             | 335    | 0.094  | 140   | 0.535    | 13.6 | 3344 | 14873 | 1293            | 5752 | 4.1    | 3284 | 14606 |
| 1200             | 366    | 0.094  | 140   | 0.535    | 13.6 | 3724 | 16564 | 1411            | 6278 | 4.1    | 3602 | 16025 |
| 1300             | 396    | 0.103  | 153   | 0.559    | 14.2 | 4231 | 18819 | 1670            | 7427 | 4.0    | 4059 | 18055 |
| 1400             | 427    | 0.103  | 153   | 0.559    | 14.2 | 4435 | 19729 | 1802            | 8017 | 4.1    | 4343 | 19317 |
| 1500             | 457    | 0.103  | 154   | 0.559    | 14.2 | 4689 | 20857 | 1935            | 8605 | 4.1    | 4638 | 20633 |
| <b>36 FIBERS</b> |        |        |       |          |      |      |       |                 |      |        |      |       |
| 100              | 30     | 0.082  | 123   | 0.500    | 12.7 | 539  | 2398  | 103             | 458  | 3.5    | 337  | 1499  |
| 200              | 61     | 0.082  | 123   | 0.500    | 12.7 | 598  | 2661  | 206             | 916  | 4.1    | 572  | 2544  |
| 300              | 91     | 0.082  | 123   | 0.500    | 12.7 | 936  | 4162  | 309             | 1375 | 4.1    | 868  | 3861  |
| 400              | 122    | 0.086  | 129   | 0.512    | 13.0 | 1189 | 5290  | 432             | 1922 | 4.1    | 1158 | 5151  |
| 500              | 152    | 0.086  | 129   | 0.512    | 13.0 | 1506 | 6699  | 540             | 2402 | 4.1    | 1452 | 6459  |
| 600              | 183    | 0.087  | 129   | 0.512    | 13.0 | 1823 | 8108  | 650             | 2891 | 4.1    | 1748 | 7775  |
| 700              | 213    | 0.092  | 137   | 0.528    | 13.4 | 2076 | 9236  | 806             | 3585 | 4.1    | 2062 | 9172  |
| 800              | 244    | 0.092  | 137   | 0.528    | 13.4 | 2456 | 10927 | 922             | 4101 | 4.1    | 2379 | 10582 |
| 900              | 274    | 0.092  | 137   | 0.528    | 13.4 | 2710 | 12054 | 1038            | 4617 | 4.1    | 2662 | 11841 |
| 1000             | 305    | 0.092  | 137   | 0.528    | 13.4 | 3090 | 13745 | 1154            | 5133 | 4.1    | 2979 | 13251 |
| 1100             | 335    | 0.095  | 142   | 0.535    | 13.6 | 3470 | 15436 | 1308            | 5818 | 4.1    | 3324 | 14786 |
| 1200             | 366    | 0.095  | 142   | 0.535    | 13.6 | 3597 | 16000 | 1427            | 6348 | 4.1    | 3578 | 15916 |
| 1300             | 396    | 0.104  | 154   | 0.559    | 14.2 | 4104 | 18255 | 1687            | 7504 | 4.1    | 4036 | 17953 |
| 1400             | 427    | 0.104  | 155   | 0.559    | 14.2 | 4435 | 19729 | 1821            | 8100 | 4.1    | 4353 | 19363 |
| 1500             | 457    | 0.104  | 155   | 0.559    | 14.2 | 4689 | 20857 | 1954            | 8692 | 4.1    | 4649 | 20680 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC HEAVY LOADING @ 1% INSTALLATION SAG

| SPAN             |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                  |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET             | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>48 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100              | 30     | 0.083  | 124   | 0.500    | 12.7 | 539  | 2398  | 104             | 463   | 3.5    | 338  | 1503  |
| 200              | 61     | 0.083  | 124   | 0.500    | 12.7 | 598  | 2661  | 209             | 930   | 4.1    | 574  | 2553  |
| 300              | 91     | 0.083  | 124   | 0.500    | 12.7 | 936  | 4162  | 313             | 1392  | 4.1    | 870  | 3870  |
| 400              | 122    | 0.087  | 130   | 0.512    | 13.0 | 1189 | 5290  | 437             | 1944  | 4.1    | 1160 | 5160  |
| 500              | 152    | 0.088  | 130   | 0.512    | 13.0 | 1506 | 6699  | 547             | 2433  | 4.1    | 1456 | 6477  |
| 600              | 183    | 0.088  | 131   | 0.512    | 13.0 | 1823 | 8108  | 658             | 2927  | 4.1    | 1752 | 7793  |
| 700              | 213    | 0.093  | 139   | 0.528    | 13.4 | 2076 | 9236  | 815             | 3625  | 4.1    | 2067 | 9194  |
| 800              | 244    | 0.093  | 139   | 0.528    | 13.4 | 2456 | 10927 | 932             | 4146  | 4.1    | 2384 | 10605 |
| 900              | 274    | 0.093  | 139   | 0.528    | 13.4 | 2710 | 12054 | 1049            | 4666  | 4.1    | 2668 | 11868 |
| 1000             | 305    | 0.093  | 139   | 0.528    | 13.4 | 3090 | 13745 | 1167            | 5191  | 4.1    | 2986 | 13282 |
| 1100             | 335    | 0.096  | 143   | 0.535    | 13.6 | 3470 | 15436 | 1322            | 5881  | 4.1    | 3332 | 14821 |
| 1200             | 366    | 0.096  | 143   | 0.535    | 13.6 | 3724 | 16564 | 1443            | 6419  | 4.1    | 3620 | 16103 |
| 1300             | 396    | 0.105  | 156   | 0.559    | 14.2 | 4104 | 18255 | 1704            | 7580  | 4.1    | 4045 | 17993 |
| 1400             | 427    | 0.105  | 156   | 0.559    | 14.2 | 4435 | 19729 | 1839            | 8180  | 4.1    | 4363 | 19408 |
| 1500             | 457    | 0.105  | 157   | 0.559    | 14.2 | 4689 | 20857 | 1974            | 8781  | 4.1    | 4660 | 20729 |
| <b>60 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100              | 30     | 0.084  | 126   | 0.500    | 12.7 | 539  | 2398  | 106             | 472   | 3.5    | 338  | 1503  |
| 200              | 61     | 0.084  | 126   | 0.500    | 12.7 | 598  | 2661  | 211             | 939   | 4.1    | 575  | 2558  |
| 300              | 91     | 0.085  | 126   | 0.500    | 12.7 | 936  | 4162  | 317             | 1410  | 4.1    | 872  | 3879  |
| 400              | 122    | 0.089  | 132   | 0.512    | 13.0 | 1189 | 5290  | 443             | 1971  | 4.1    | 1163 | 5173  |
| 500              | 152    | 0.089  | 132   | 0.512    | 13.0 | 1569 | 6981  | 554             | 2464  | 4.1    | 1476 | 6566  |
| 600              | 183    | 0.089  | 132   | 0.512    | 13.0 | 1823 | 8108  | 666             | 2963  | 4.1    | 1756 | 7811  |
| 700              | 213    | 0.094  | 140   | 0.528    | 13.4 | 2076 | 9236  | 825             | 3670  | 4.1    | 2072 | 9217  |
| 800              | 244    | 0.094  | 140   | 0.528    | 13.4 | 2456 | 10927 | 943             | 4195  | 4.1    | 2390 | 10631 |
| 900              | 274    | 0.094  | 140   | 0.528    | 13.4 | 2710 | 12054 | 1061            | 4720  | 4.1    | 2675 | 11899 |
| 1000             | 305    | 0.094  | 140   | 0.528    | 13.4 | 2963 | 13182 | 1180            | 5249  | 4.1    | 2960 | 13167 |
| 1100             | 335    | 0.097  | 145   | 0.535    | 13.6 | 3344 | 14873 | 1337            | 5947  | 4.1    | 3307 | 14710 |
| 1200             | 366    | 0.097  | 145   | 0.535    | 13.6 | 3597 | 16000 | 1459            | 6490  | 4.1    | 3595 | 15991 |
| 1300             | 396    | 0.106  | 158   | 0.559    | 14.2 | 4104 | 18255 | 1721            | 7655  | 4.1    | 4055 | 18038 |
| 1400             | 427    | 0.106  | 158   | 0.559    | 14.2 | 4435 | 19729 | 1858            | 8265  | 4.0    | 4373 | 19452 |
| 1500             | 457    | 0.106  | 158   | 0.559    | 14.2 | 4689 | 20857 | 1994            | 8870  | 4.1    | 4671 | 20778 |
| <b>72 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100              | 30     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 125             | 556   | 3.1    | 400  | 1779  |
| 200              | 61     | 0.100  | 148   | 0.535    | 13.6 | 854  | 3797  | 249             | 1108  | 3.7    | 662  | 2945  |
| 300              | 91     | 0.100  | 148   | 0.535    | 13.6 | 913  | 4060  | 374             | 1664  | 4.1    | 907  | 4035  |
| 400              | 122    | 0.108  | 161   | 0.559    | 14.2 | 1314 | 5843  | 542             | 2411  | 4.0    | 1267 | 5636  |
| 500              | 152    | 0.108  | 161   | 0.559    | 14.2 | 1567 | 6970  | 678             | 3016  | 4.0    | 1565 | 6961  |
| 600              | 183    | 0.108  | 161   | 0.559    | 14.2 | 1884 | 8380  | 814             | 3621  | 4.0    | 1879 | 8358  |
| 700              | 213    | 0.109  | 162   | 0.559    | 14.2 | 2264 | 10071 | 950             | 4226  | 4.0    | 2210 | 9831  |
| 800              | 244    | 0.109  | 162   | 0.559    | 14.2 | 2644 | 11762 | 1088            | 4840  | 4.0    | 2541 | 11303 |
| 900              | 274    | 0.109  | 162   | 0.559    | 14.2 | 2898 | 12889 | 1224            | 5445  | 4.0    | 2839 | 12629 |
| 1000             | 305    | 0.109  | 162   | 0.559    | 14.2 | 3151 | 14017 | 1361            | 6054  | 4.0    | 3138 | 13959 |
| 1100             | 335    | 0.115  | 171   | 0.575    | 14.6 | 3531 | 15708 | 1579            | 7024  | 4.0    | 3531 | 15707 |
| 1200             | 366    | 0.115  | 171   | 0.575    | 14.6 | 3911 | 17399 | 1723            | 7664  | 4.0    | 3867 | 17201 |
| 1300             | 396    | 0.115  | 171   | 0.575    | 14.6 | 4292 | 19090 | 1870            | 8318  | 4.0    | 4205 | 18705 |
| 1400             | 427    | 0.115  | 171   | 0.575    | 14.6 | 4545 | 20217 | 2015            | 8963  | 4.0    | 4509 | 20057 |
| 1500             | 457    | 0.123  | 183   | 0.594    | 15.1 | 5069 | 22548 | 2308            | 10266 | 3.9    | 4994 | 22214 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NEC HEAVY LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>84 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 164             | 730   | 2.8    | 483  | 2148  |
| 200               | 61     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 328             | 1459  | 3.3    | 803  | 3572  |
| 300               | 91     | 0.131  | 195   | 0.610    | 15.5 | 1296 | 5763  | 492             | 2189  | 3.7    | 1085 | 4826  |
| 400               | 122    | 0.131  | 195   | 0.610    | 15.5 | 1384 | 6158  | 656             | 2918  | 3.9    | 1369 | 6090  |
| 500               | 152    | 0.131  | 195   | 0.610    | 15.5 | 1756 | 7810  | 821             | 3652  | 3.9    | 1718 | 7642  |
| 600               | 183    | 0.131  | 195   | 0.610    | 15.5 | 2072 | 9219  | 985             | 4381  | 3.9    | 2053 | 9132  |
| 700               | 213    | 0.138  | 205   | 0.626    | 15.9 | 2453 | 10910 | 1208            | 5373  | 3.9    | 2448 | 10889 |
| 800               | 244    | 0.138  | 205   | 0.626    | 15.9 | 2833 | 12601 | 1381            | 6143  | 3.9    | 2806 | 12482 |
| 900               | 274    | 0.138  | 206   | 0.626    | 15.9 | 3213 | 14292 | 1554            | 6913  | 3.9    | 3163 | 14070 |
| 1000              | 305    | 0.138  | 206   | 0.626    | 15.9 | 3593 | 15983 | 1727            | 7682  | 3.9    | 3521 | 15662 |
| 1100              | 335    | 0.145  | 216   | 0.642    | 16.3 | 3973 | 17674 | 1992            | 8861  | 3.9    | 3948 | 17562 |
| 1200              | 366    | 0.145  | 216   | 0.642    | 16.3 | 4354 | 19365 | 2174            | 9670  | 3.8    | 4312 | 19181 |
| 1300              | 396    | 0.145  | 216   | 0.642    | 16.3 | 4734 | 21056 | 2356            | 10480 | 3.8    | 4676 | 20800 |
| 1400              | 427    | 0.148  | 220   | 0.661    | 16.8 | 5196 | 23112 | 2587            | 11508 | 3.8    | 5115 | 22753 |
| 1500              | 457    | 0.148  | 220   | 0.661    | 16.8 | 5576 | 24803 | 2773            | 12335 | 3.8    | 5483 | 24390 |
| <b>96 FIBERS</b>  |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 165             | 734   | 2.8    | 483  | 2148  |
| 200               | 61     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 331             | 1472  | 3.3    | 805  | 3581  |
| 300               | 91     | 0.132  | 197   | 0.610    | 15.5 | 1296 | 5763  | 496             | 2206  | 3.7    | 1088 | 4840  |
| 400               | 122    | 0.132  | 197   | 0.610    | 15.5 | 1384 | 6158  | 662             | 2945  | 3.9    | 1372 | 6103  |
| 500               | 152    | 0.132  | 197   | 0.610    | 15.5 | 1756 | 7810  | 827             | 3679  | 3.9    | 1722 | 7660  |
| 600               | 183    | 0.132  | 197   | 0.610    | 15.5 | 2072 | 9219  | 993             | 4417  | 3.9    | 2058 | 9154  |
| 700               | 213    | 0.139  | 207   | 0.626    | 15.9 | 2579 | 11474 | 1217            | 5413  | 3.8    | 2484 | 11049 |
| 800               | 244    | 0.139  | 207   | 0.626    | 15.9 | 2833 | 12601 | 1391            | 6187  | 3.9    | 2812 | 12508 |
| 900               | 274    | 0.139  | 207   | 0.626    | 15.9 | 3213 | 14292 | 1566            | 6966  | 3.9    | 3170 | 14101 |
| 1000              | 305    | 0.139  | 207   | 0.626    | 15.9 | 3593 | 15983 | 1741            | 7744  | 3.9    | 3528 | 15693 |
| 1100              | 335    | 0.146  | 217   | 0.642    | 16.3 | 3973 | 17674 | 2007            | 8928  | 3.8    | 3957 | 17602 |
| 1200              | 366    | 0.146  | 217   | 0.642    | 16.3 | 4480 | 19929 | 2191            | 9746  | 3.8    | 4352 | 19359 |
| 1300              | 396    | 0.146  | 217   | 0.642    | 16.3 | 4734 | 21056 | 2374            | 10560 | 3.8    | 4686 | 20844 |
| 1400              | 427    | 0.149  | 222   | 0.661    | 16.8 | 5196 | 23112 | 2606            | 11592 | 3.8    | 5126 | 22802 |
| 1500              | 457    | 0.149  | 222   | 0.661    | 16.8 | 5576 | 24803 | 2793            | 12424 | 3.8    | 5495 | 24443 |
| <b>108 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 213             | 947   | 2.5    | 589  | 2620  |
| 200               | 61     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 426             | 1895  | 2.9    | 986  | 4386  |
| 300               | 91     | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 639             | 2842  | 3.3    | 1337 | 5947  |
| 400               | 122    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 852             | 3790  | 3.5    | 1662 | 7393  |
| 500               | 152    | 0.170  | 254   | 0.685    | 17.4 | 2070 | 9207  | 1065            | 4737  | 3.7    | 1972 | 8772  |
| 600               | 183    | 0.170  | 254   | 0.685    | 17.4 | 2340 | 10408 | 1278            | 5685  | 3.7    | 2334 | 10382 |
| 700               | 213    | 0.178  | 265   | 0.701    | 17.8 | 2847 | 12663 | 1556            | 6921  | 3.7    | 2799 | 12451 |
| 800               | 244    | 0.178  | 265   | 0.701    | 17.8 | 3227 | 14354 | 1780            | 7918  | 3.7    | 3195 | 14212 |
| 900               | 274    | 0.178  | 265   | 0.701    | 17.8 | 3607 | 16045 | 2003            | 8910  | 3.7    | 3589 | 15965 |
| 1000              | 305    | 0.178  | 265   | 0.701    | 17.8 | 3987 | 17736 | 2226            | 9902  | 3.7    | 3984 | 17722 |
| 1100              | 335    | 0.186  | 276   | 0.717    | 18.2 | 4494 | 19991 | 2552            | 11352 | 3.7    | 4487 | 19959 |
| 1200              | 366    | 0.186  | 276   | 0.717    | 18.2 | 5001 | 22246 | 2785            | 12388 | 3.7    | 4917 | 21872 |
| 1300              | 396    | 0.186  | 276   | 0.717    | 18.2 | 5381 | 23937 | 3019            | 13429 | 3.7    | 5320 | 23665 |
| 1400              | 427    | 0.186  | 277   | 0.717    | 18.2 | 5761 | 25628 | 3252            | 14466 | 3.7    | 5722 | 25453 |
| 1500              | 457    | 0.188  | 279   | 0.748    | 19.0 | 6336 | 28185 | 3518            | 15649 | 3.7    | 6235 | 27735 |

\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NESC HEAVY LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>120 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 214             | 952   | 2.5    | 590  | 2624  |
| 200               | 61     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 429             | 1908  | 2.9    | 988  | 4395  |
| 300               | 91     | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 643             | 2860  | 3.3    | 1339 | 5956  |
| 400               | 122    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 857             | 3812  | 3.5    | 1666 | 7411  |
| 500               | 152    | 0.171  | 255   | 0.685    | 17.4 | 2070 | 9207  | 1072            | 4768  | 3.7    | 1976 | 8790  |
| 600               | 183    | 0.172  | 255   | 0.685    | 17.4 | 2340 | 10408 | 1287            | 5725  | 3.7    | 2339 | 10404 |
| 700               | 213    | 0.179  | 266   | 0.701    | 17.8 | 2847 | 12663 | 1565            | 6961  | 3.7    | 2805 | 12477 |
| 800               | 244    | 0.179  | 266   | 0.701    | 17.8 | 3227 | 14354 | 1791            | 7967  | 3.7    | 3201 | 14239 |
| 900               | 274    | 0.179  | 267   | 0.701    | 17.8 | 3607 | 16045 | 2015            | 8963  | 3.7    | 3597 | 16000 |
| 1000              | 305    | 0.179  | 267   | 0.701    | 17.8 | 4114 | 18300 | 2240            | 9964  | 3.7    | 4021 | 17886 |
| 1100              | 335    | 0.187  | 278   | 0.717    | 18.2 | 4621 | 20554 | 2567            | 11419 | 3.6    | 4524 | 20124 |
| 1200              | 366    | 0.187  | 278   | 0.717    | 18.2 | 5001 | 22246 | 2802            | 12464 | 3.6    | 4928 | 21921 |
| 1300              | 396    | 0.187  | 278   | 0.717    | 18.2 | 5381 | 23937 | 3036            | 13505 | 3.7    | 5331 | 23713 |
| 1400              | 427    | 0.187  | 278   | 0.717    | 18.2 | 5761 | 25628 | 3271            | 14550 | 3.7    | 5734 | 25506 |
| 1500              | 457    | 0.189  | 281   | 0.748    | 19.0 | 6336 | 28185 | 3539            | 15742 | 3.7    | 6247 | 27788 |
| <b>132 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 260             | 1157  | 2.5    | 631  | 2807  |
| 200               | 61     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 520             | 2313  | 2.9    | 1064 | 4733  |
| 300               | 91     | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 780             | 3470  | 3.2    | 1450 | 6450  |
| 400               | 122    | 0.208  | 310   | 0.764    | 19.4 | 2070 | 9207  | 1040            | 4626  | 3.5    | 1811 | 8056  |
| 500               | 152    | 0.208  | 310   | 0.764    | 19.4 | 2188 | 9734  | 1300            | 5783  | 3.6    | 2183 | 9710  |
| 600               | 183    | 0.208  | 310   | 0.764    | 19.4 | 2657 | 11817 | 1561            | 6944  | 3.6    | 2626 | 11681 |
| 700               | 213    | 0.216  | 322   | 0.780    | 19.8 | 3227 | 14354 | 1893            | 8420  | 3.5    | 3147 | 13999 |
| 800               | 244    | 0.216  | 322   | 0.780    | 19.8 | 3607 | 16045 | 2164            | 9626  | 3.5    | 3580 | 15925 |
| 900               | 274    | 0.217  | 322   | 0.780    | 19.8 | 4114 | 18300 | 2437            | 10840 | 3.5    | 4041 | 17975 |
| 1000              | 305    | 0.217  | 322   | 0.780    | 19.8 | 4494 | 19991 | 2708            | 12046 | 3.5    | 4474 | 19901 |
| 1100              | 335    | 0.217  | 323   | 0.780    | 19.8 | 5001 | 22246 | 2980            | 13256 | 3.5    | 4935 | 21952 |
| 1200              | 366    | 0.225  | 335   | 0.795    | 20.2 | 5508 | 24500 | 3376            | 15017 | 3.5    | 5493 | 24434 |
| 1300              | 396    | 0.221  | 328   | 0.811    | 20.6 | 5956 | 26494 | 3584            | 15942 | 3.5    | 5921 | 26338 |
| 1400              | 427    | 0.220  | 327   | 0.811    | 20.6 | 6463 | 28749 | 3844            | 17099 | 3.5    | 6377 | 28366 |
| 1500              | 457    | 0.220  | 327   | 0.811    | 20.6 | 6843 | 30440 | 4120            | 18327 | 3.6    | 6816 | 30319 |
| <b>144 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 261             | 1161  | 2.5    | 632  | 2811  |
| 200               | 61     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 523             | 2326  | 2.9    | 1065 | 4737  |
| 300               | 91     | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 784             | 3487  | 3.2    | 1452 | 6459  |
| 400               | 122    | 0.209  | 311   | 0.764    | 19.4 | 2070 | 9207  | 1046            | 4653  | 3.4    | 1815 | 8074  |
| 500               | 152    | 0.209  | 311   | 0.764    | 19.4 | 2188 | 9734  | 1307            | 5814  | 3.6    | 2187 | 9728  |
| 600               | 183    | 0.209  | 311   | 0.764    | 19.4 | 2657 | 11817 | 1569            | 6979  | 3.6    | 2631 | 11703 |
| 700               | 213    | 0.217  | 324   | 0.780    | 19.8 | 3227 | 14354 | 1902            | 8461  | 3.5    | 3153 | 14025 |
| 800               | 244    | 0.217  | 324   | 0.780    | 19.8 | 3607 | 16045 | 2175            | 9675  | 3.5    | 3587 | 15956 |
| 900               | 274    | 0.218  | 324   | 0.780    | 19.8 | 4114 | 18300 | 2449            | 10894 | 3.5    | 4049 | 18011 |
| 1000              | 305    | 0.218  | 324   | 0.780    | 19.8 | 4494 | 19991 | 2722            | 12108 | 3.5    | 4483 | 19941 |
| 1100              | 335    | 0.218  | 324   | 0.780    | 19.8 | 5001 | 22246 | 2995            | 13322 | 3.5    | 4944 | 21992 |
| 1200              | 366    | 0.226  | 337   | 0.795    | 20.2 | 5508 | 24500 | 3392            | 15088 | 3.5    | 5504 | 24483 |
| 1300              | 396    | 0.222  | 330   | 0.811    | 20.6 | 6083 | 27057 | 3602            | 16022 | 3.5    | 5960 | 26511 |
| 1400              | 427    | 0.221  | 329   | 0.811    | 20.6 | 6463 | 28749 | 3863            | 17183 | 3.5    | 6389 | 28420 |
| 1500              | 457    | 0.221  | 329   | 0.811    | 20.6 | 6843 | 30440 | 4141            | 18420 | 3.6    | 6829 | 30377 |

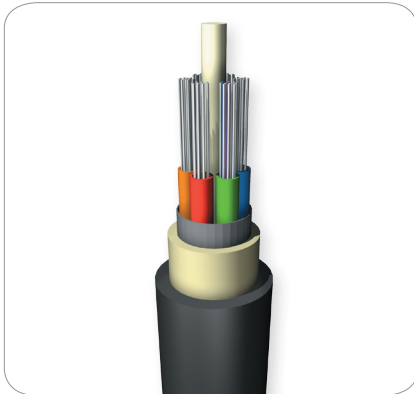
\* Initial tension indicates tension before 10 year creep.

## Standard ADSS Fiber Optic Cable

### NEC HEAVY LOADING @ 1% INSTALLATION SAG

| SPAN              |        | WEIGHT |       | DIAMETER |      | MRCL |       | INITIAL TENSION |       |        |      |       |
|-------------------|--------|--------|-------|----------|------|------|-------|-----------------|-------|--------|------|-------|
|                   |        |        |       |          |      |      |       | UNLOADED        |       | LOADED |      |       |
| FEET              | METERS | LBS/FT | KG/KM | INCHES   | MM   | LBS  | N     | LBS             | N     | SAG %  | LBS  | N     |
| <b>216 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.202  | 301   | 0.780    | 19.8 | 854  | 3797  | 253             | 1125  | 3.1    | 505  | 2246  |
| 200               | 61     | 0.202  | 301   | 0.780    | 19.8 | 913  | 4060  | 505             | 2246  | 3.6    | 875  | 3892  |
| 300               | 91     | 0.202  | 301   | 0.780    | 19.8 | 1314 | 5843  | 758             | 3372  | 3.6    | 1300 | 5783  |
| 400               | 122    | 0.202  | 301   | 0.780    | 19.8 | 1884 | 8380  | 1012            | 4502  | 3.6    | 1762 | 7838  |
| 500               | 152    | 0.211  | 313   | 0.795    | 20.2 | 2264 | 10071 | 1316            | 5854  | 3.6    | 2224 | 9893  |
| 600               | 183    | 0.211  | 314   | 0.795    | 20.2 | 2771 | 12326 | 1580            | 7028  | 3.6    | 2681 | 11926 |
| 700               | 213    | 0.211  | 314   | 0.795    | 20.2 | 3151 | 14017 | 1844            | 8203  | 3.6    | 3111 | 13838 |
| 800               | 244    | 0.211  | 314   | 0.795    | 20.2 | 3658 | 16271 | 2108            | 9377  | 3.6    | 3568 | 15871 |
| 900               | 274    | 0.211  | 314   | 0.795    | 20.2 | 4038 | 17963 | 2373            | 10556 | 3.6    | 3998 | 17784 |
| 1000              | 305    | 0.219  | 326   | 0.811    | 20.6 | 4545 | 20217 | 2742            | 12197 | 3.6    | 4538 | 20186 |
| 1100              | 335    | 0.220  | 327   | 0.811    | 20.6 | 5069 | 22548 | 3022            | 13443 | 3.5    | 5010 | 22286 |
| 1200              | 366    | 0.220  | 327   | 0.811    | 20.6 | 5576 | 24803 | 3300            | 14679 | 3.5    | 5477 | 24363 |
| 1300              | 396    | 0.229  | 340   | 0.827    | 21.0 | 6083 | 27057 | 3716            | 16530 | 3.5    | 6053 | 26925 |
| 1400              | 427    | 0.228  | 339   | 0.827    | 21.0 | 6590 | 29312 | 3983            | 17717 | 3.5    | 6515 | 28980 |
| 1500              | 457    | 0.228  | 339   | 0.827    | 21.0 | 6970 | 31003 | 4269            | 18989 | 3.5    | 6962 | 30969 |
| <b>288 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 323             | 1439  | 2.8    | 619  | 2753  |
| 200               | 61     | 0.259  | 385   | 0.890    | 22.6 | 1296 | 5763  | 647             | 2878  | 3.3    | 1061 | 4720  |
| 300               | 91     | 0.259  | 385   | 0.890    | 22.6 | 1566 | 6964  | 971             | 4317  | 3.4    | 1522 | 6771  |
| 400               | 122    | 0.259  | 385   | 0.890    | 22.6 | 2072 | 9219  | 1295            | 5759  | 3.4    | 2027 | 9016  |
| 500               | 152    | 0.259  | 385   | 0.890    | 22.6 | 2579 | 11474 | 1619            | 7201  | 3.4    | 2532 | 11262 |
| 600               | 183    | 0.259  | 386   | 0.890    | 22.6 | 3086 | 13728 | 1943            | 8644  | 3.4    | 3037 | 13509 |
| 700               | 213    | 0.269  | 400   | 0.906    | 23.0 | 3720 | 16547 | 2351            | 10460 | 3.4    | 3633 | 16163 |
| 800               | 244    | 0.269  | 400   | 0.906    | 23.0 | 4227 | 18802 | 2688            | 11958 | 3.4    | 4148 | 18453 |
| 900               | 274    | 0.269  | 400   | 0.906    | 23.0 | 4734 | 21056 | 3025            | 13457 | 3.4    | 4663 | 20744 |
| 1000              | 305    | 0.268  | 399   | 0.921    | 23.4 | 5196 | 23112 | 3350            | 14900 | 3.4    | 5176 | 23026 |
| 1100              | 335    | 0.268  | 399   | 0.921    | 23.4 | 5703 | 25366 | 3686            | 16396 | 3.4    | 5692 | 25321 |
| 1200              | 366    | 0.268  | 399   | 0.921    | 23.4 | 6209 | 27621 | 4022            | 17892 | 3.4    | 6208 | 27616 |
| 1300              | 396    | 0.267  | 397   | 0.921    | 23.4 | 6716 | 29876 | 4339            | 19301 | 3.4    | 6711 | 29854 |
| 1400              | 427    | 0.277  | 412   | 0.937    | 23.8 | 7477 | 33258 | 4845            | 21552 | 3.4    | 7412 | 32972 |
| 1500              | 457    | 0.277  | 412   | 0.937    | 23.8 | 7984 | 35513 | 5193            | 23098 | 3.4    | 7938 | 35308 |
| <b>432 FIBERS</b> |        |        |       |          |      |      |       |                 |       |        |      |       |
| 100               | 30     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 373             | 1658  | 2.8    | 659  | 2931  |
| 200               | 61     | 0.298  | 444   | 0.953    | 24.2 | 1296 | 5763  | 745             | 3316  | 3.2    | 1140 | 5070  |
| 300               | 91     | 0.298  | 444   | 0.953    | 24.2 | 1692 | 7528  | 1118            | 4975  | 3.3    | 1665 | 7405  |
| 400               | 122    | 0.298  | 444   | 0.953    | 24.2 | 2326 | 10346 | 1492            | 6636  | 3.3    | 2233 | 9932  |
| 500               | 152    | 0.298  | 444   | 0.953    | 24.2 | 2833 | 12601 | 1865            | 8298  | 3.3    | 2778 | 12356 |
| 600               | 183    | 0.299  | 444   | 0.953    | 24.2 | 3340 | 14856 | 2239            | 9960  | 3.3    | 3322 | 14779 |
| 700               | 213    | 0.309  | 459   | 0.969    | 24.6 | 3973 | 17674 | 2701            | 12015 | 3.3    | 3962 | 17625 |
| 800               | 244    | 0.309  | 460   | 0.969    | 24.6 | 4607 | 20493 | 3088            | 13737 | 3.3    | 4541 | 20202 |
| 900               | 274    | 0.320  | 476   | 0.984    | 25.0 | 5322 | 23675 | 3597            | 15999 | 3.2    | 5233 | 23279 |
| 1000              | 305    | 0.320  | 476   | 0.984    | 25.0 | 5829 | 25930 | 3997            | 17781 | 3.2    | 5800 | 25800 |
| 1100              | 335    | 0.319  | 474   | 0.984    | 25.0 | 6463 | 28749 | 4382            | 19490 | 3.2    | 6379 | 28374 |
| 1200              | 366    | 0.319  | 474   | 0.984    | 25.0 | 6970 | 31003 | 4781            | 21268 | 3.3    | 6945 | 30891 |
| 1300              | 396    | 0.329  | 490   | 1.000    | 25.4 | 7730 | 34385 | 5350            | 23799 | 3.2    | 7695 | 34229 |
| 1400              | 427    | 0.329  | 490   | 1.000    | 25.4 | 8364 | 37204 | 5764            | 25639 | 3.2    | 8295 | 36899 |
| 1500              | 457    | 0.329  | 490   | 1.000    | 25.4 | 8997 | 40022 | 6178            | 27479 | 3.2    | 8896 | 39570 |

\* Initial tension indicates tension before 10 year creep.



### Non-Armored Loose Tube Cable – Single Jacket

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations. With fiber counts up to 576 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

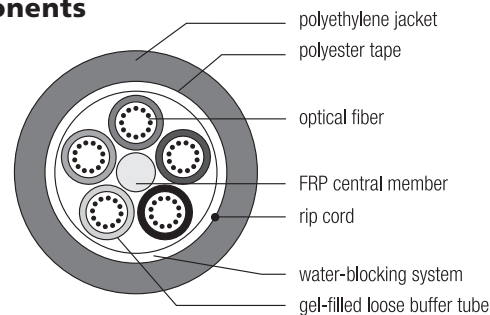
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Cable Components



#### Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|--------|-----------|--------|
|             | SINGLE-MODE      |        | MULTIMODE |        |
|             | FEET             | METERS | FEET      | METERS |
| 6 - 60      | 22,900           | 7,000  | 22,900    | 7,000  |
| 72 - 96     | 22,900           | 7,000  | 22,900    | 7,000  |
| 108 - 120   | 22,900           | 7,000  | 22,900    | 7,000  |
| 132 - 144   | 22,900           | 7,000  | 22,900    | 7,000  |
| 146 - 216   | 22,900           | 7,000  | 22,900    | 7,000  |
| 218 - 288   | 16,400           | 5,000  | 16,400    | 5,000  |
| 290 - 432   | 14,100           | 4,300  | 14,000    | 4,300  |
| 434 - 576   | 10,800           | 3,300  | 11,000    | 3,300  |

\* Longer lengths may be available upon request.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000                | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                   | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                  | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (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) SM Futureguide SR-15e Bend Insensitive  | 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.

## Non-Armored Loose Tube Cable – Single Jacket

### 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  |
| LE006★C5101N1 | 6           | 1w/6 (4 fillers)        | 0.41             | 10.5 | 56             | 83    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE012★C5101N1 | 12          | 1w/12 (4 fillers)       | 0.41             | 10.5 | 56             | 84    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE018★C5101N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.41             | 10.5 | 57             | 85    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE024★C5101N1 | 24          | 2w/12 (3 fillers)       | 0.41             | 10.5 | 57             | 85    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE030★C5101N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.41             | 10.5 | 58             | 86    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE036★C5101N1 | 36          | 3w/12 (2 fillers)       | 0.41             | 10.5 | 58             | 86    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE048★C5101N1 | 48          | 4w/12 (1 filler)        | 0.41             | 10.5 | 59             | 87    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE060★C5101N1 | 60          | 5w/12 (no fillers)      | 0.41             | 10.5 | 60             | 89    | 600 (2670)           | 200 (890) | 8.2 (21)            | 4.1 (11)   |
| LE072★C6101N1 | 72          | 6w/12 (no fillers)      | 0.45             | 11.5 | 71             | 106   | 600 (2670)           | 200 (890) | 9.0 (22)            | 4.5 (11.5) |
| LE084★C8101N1 | 84          | 7w/12 (1 filler)        | 0.52             | 13.3 | 90             | 135   | 600 (2670)           | 200 (890) | 10.4 (27)           | 5.2 (14)   |
| LE096★C8101N1 | 96          | 8w/12 (no fillers)      | 0.52             | 13.3 | 91             | 136   | 600 (2670)           | 200 (890) | 10.4 (27)           | 5.2 (14)   |
| LE108★CA101N1 | 108         | 9w/12 (1 filler)        | 0.59             | 15.1 | 117            | 174   | 600 (2670)           | 200 (890) | 11.8 (31)           | 5.9 (16)   |
| LE120★CA101N1 | 120         | 10w/12 (no fillers)     | 0.59             | 15.1 | 118            | 175   | 600 (2670)           | 200 (890) | 11.8 (31)           | 5.9 (16)   |
| LE132★CC101N1 | 132         | 11w/12 (1 filler)       | 0.67             | 17.0 | 147            | 219   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)   |
| LE144★CC101N1 | 144         | 12w/12 (no fillers)     | 0.67             | 17.0 | 148            | 220   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)   |
| LE216★CI301N1 | 216         | 18w/12 (no fillers)     | 0.69             | 17.4 | 150            | 224   | 600 (2670)           | 200 (890) | 14.0 (35)           | 6.9 (18)   |
| LE288★CO301N1 | 288         | 24w/12 (no fillers)     | 0.79             | 20.1 | 202            | 301   | 600 (2670)           | 200 (890) | 17.3 (41)           | 7.9 (21)   |
| LE432★IO301N1 | 432         | 24w/18 (no fillers)     | 0.87             | 22.0 | 242            | 360   | 600 (2670)           | 200 (890) | 17.4 (44)           | 8.7 (22)   |
| LE576★OO301N1 | 576         | 24w/24 (no fillers)     | 1.00             | 25.3 | 319            | 475   | 600 (2670)           | 200 (890) | 20.1 (51)           | 10.2 (26)  |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

9 = Single-mode

L = 50/125 µm multimode Laser-Link™ 300

K = SM Futureguide SR-15e Bend Insensitive

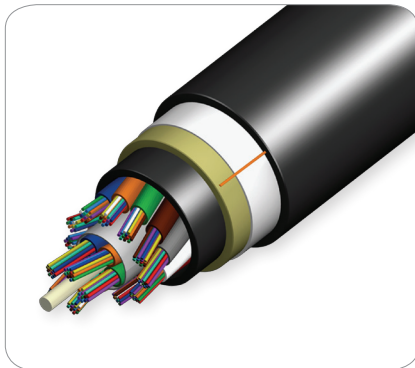
Q = Non-zero dispersion-shifted single-mode

### 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.



### Non-Armored Loose Tube Cable – Double Jacket

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Double Jacket Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations while incorporating a second jacket when extra mechanical protection is desired. With fiber counts up to 576 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/ RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

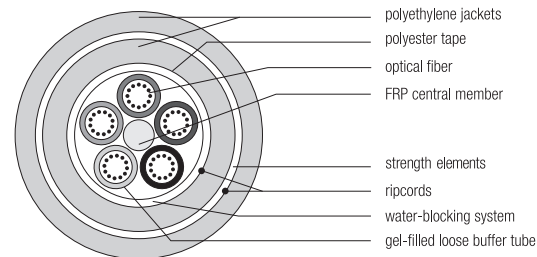
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Cable Components



#### Typical Lengths

| MAXIMUM LENGTHS* |             |        |           |        |
|------------------|-------------|--------|-----------|--------|
| FIBER COUNT      | SINGLE-MODE |        | MULTIMODE |        |
|                  | FEET        | METERS | FEET      | METERS |
| 6 - 60           | 22,900      | 7,000  | 22,900    | 7,000  |
| 72 - 96          | 22,900      | 7,000  | 22,900    | 7,000  |
| 108 - 120        | 22,900      | 7,000  | 22,900    | 7,000  |
| 132 - 144        | 22,900      | 7,000  | 22,900    | 7,000  |
| 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.

#### Optical Information

| FIBER TYPE                                | MAXIMUM ATTENUATION (DB/KM) |         |         |         | OVERFILL LAUNCH MIN. BANDWIDTH (MHZ•KM) |         | GIGABIT ETHERNET MINIMUM 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     |
| (8) 62.5/125 GIGA-Link™ 1000              | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                             | 1000    |
| (5) 50/125 GIGA-Link™ 600                 | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                             | 600     |
| (7) 50/125 GIGA-Link™ 2000                | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                             | 2000    |
| (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    |
| (K) SM Futurguide SR-15e Bend Insensitive | 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.

## Non-Armored Loose Tube Cable – Double Jacket

### 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 |
| LE006★C5111N1 | 6           | 1w/6 (4 fillers)        | 0.49             | 12.5 | 79             | 118   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE012★C5111N1 | 12          | 1w/12 (4 fillers)       | 0.49             | 12.5 | 80             | 119   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE018★C5111N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.49             | 12.5 | 81             | 120   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE024★C5111N1 | 24          | 2w/12 (3 fillers)       | 0.49             | 12.5 | 81             | 120   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE030★C5111N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.49             | 12.5 | 82             | 121   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE036★C5111N1 | 36          | 3w/12 (2 fillers)       | 0.49             | 12.5 | 82             | 121   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE048★C5111N1 | 48          | 4w/12 (1 filler)        | 0.49             | 12.5 | 83             | 123   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE060★C5111N1 | 60          | 5w/12 (no fillers)      | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LE072★C6111N1 | 72          | 6w/12 (no fillers)      | 0.53             | 13.4 | 97             | 144   | 600 (2670)           | 200 (890) | 10.6 (27)           | 5.3 (14)  |
| LE084★C8111N1 | 84          | 7w/12 (1 filler)        | 0.60             | 15.2 | 120            | 178   | 600 (2670)           | 200 (890) | 12.0 (31)           | 6.0 (16)  |
| LE096★C8111N1 | 96          | 8w/12 (no fillers)      | 0.60             | 15.2 | 121            | 180   | 600 (2670)           | 200 (890) | 12.0 (31)           | 6.0 (16)  |
| LE108★CA111N1 | 108         | 9w/12 (1 filler)        | 0.67             | 17.1 | 150            | 222   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)  |
| LE120★CA111N1 | 120         | 10w/12 (no fillers)     | 0.67             | 17.1 | 151            | 224   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)  |
| LE132★CC111N1 | 132         | 11w/12 (1 filler)       | 0.75             | 19.0 | 184            | 273   | 600 (2670)           | 200 (890) | 15.0 (38)           | 7.5 (19)  |
| LE144★CC111N1 | 144         | 12w/12 (no fillers)     | 0.75             | 19.0 | 185            | 275   | 600 (2670)           | 200 (890) | 15.0 (38)           | 7.5 (19)  |
| LE216★CI311N1 | 216         | 18w/12 (no fillers)     | 0.76             | 19.3 | 188            | 280   | 600 (2670)           | 200 (890) | 15.2 (39)           | 7.6 (20)  |
| LE288★CO311N1 | 288         | 24w/12 (no fillers)     | 0.87             | 22.0 | 245            | 365   | 600 (2670)           | 200 (890) | 17.4 (44)           | 8.7 (22)  |
| LE432★IO311N1 | 432         | 24w/18 (no fillers)     | 0.94             | 23.9 | 289            | 430   | 600 (2670)           | 200 (890) | 18.8 (48)           | 9.4 (24)  |
| LE576★OO311N1 | 576         | 24w/24 (no fillers)     | 1.08             | 27.3 | 372            | 554   | 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 corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

K = SM Futureguide SR-15e Bend Insensitive

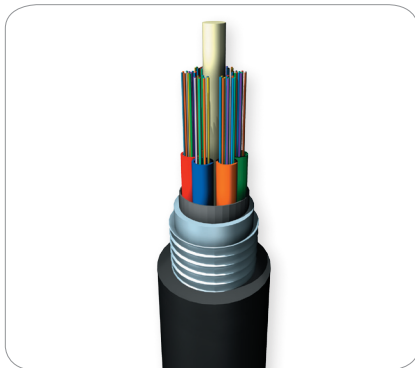
Q = Non-zero dispersion-shifted single-mode

### 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.



### Armored Loose Tube Cable – Single Jacket/Single Armor

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Loose Tube Single Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. With fiber counts up to 144 and S-Z strand designs for easy mid-span access, AFL's cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

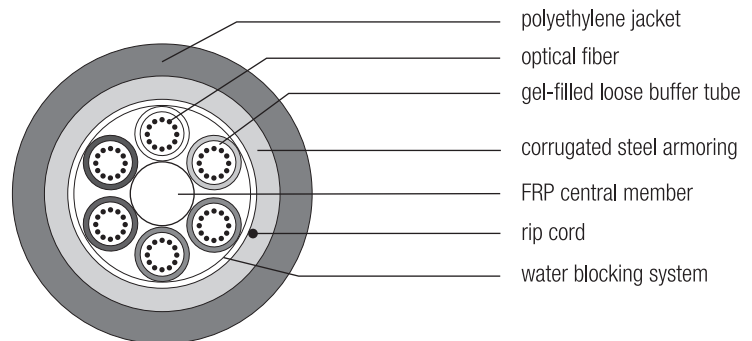
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Cable Components



#### Typical Lengths

| MAXIMUM LENGTHS* |             |        |           |        |
|------------------|-------------|--------|-----------|--------|
| FIBER COUNT      | SINGLE-MODE |        | MULTIMODE |        |
|                  | FEET        | METERS | FEET      | METERS |
| 6 - 144          | 19,686      | 6,000  | 19,686    | 6,000  |

\* Longer lengths may be available upon request.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000               | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                  | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                 | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (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    |
| (K) SM Futureguide SR-15e Bend Insensitive | 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.

## Armored Loose Tube Cable – Single Jacket/Single Armor

### 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  |
| LE006★C5201S1 | 6           | 1w/6 (4 fillers)        | 0.52             | 13.3 | 102            | 152   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE012★C5201S1 | 12          | 1w/12 (4 fillers)       | 0.52             | 13.3 | 102            | 152   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE018★C5201S1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.52             | 13.3 | 103            | 153   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE024★C5201S1 | 24          | 2w/12 (3 fillers)       | 0.52             | 13.3 | 103            | 154   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE030★C5201S1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.52             | 13.3 | 104            | 155   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE036★C5201S1 | 36          | 3w/12 (2 fillers)       | 0.52             | 13.3 | 104            | 155   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE048★C5201S1 | 48          | 4w/12 (1 filler)        | 0.52             | 13.3 | 105            | 157   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE060★C5201S1 | 60          | 5w/12 (no fillers)      | 0.52             | 13.3 | 106            | 158   | 600 (2670)           | 200 (890) | 10.7 (28)           | 5.4 (14)   |
| LE072★C6201S1 | 72          | 6w/12 (no fillers)      | 0.56             | 14.2 | 120            | 179   | 600 (2670)           | 200 (890) | 11.4 (29)           | 5.7 (15)   |
| LE084★C8201S1 | 84          | 7w/12 (1 filler)        | 0.63             | 16.0 | 146            | 218   | 600 (2670)           | 200 (890) | 12.8 (33)           | 6.4 (16.3) |
| LE096★C8201S1 | 96          | 8w/12 (no fillers)      | 0.63             | 16.0 | 147            | 219   | 600 (2670)           | 200 (890) | 12.8 (33)           | 6.4 (16.3) |
| LE108★CA201S1 | 108         | 9w/12 (1 filler)        | 0.70             | 17.8 | 176            | 262   | 600 (2670)           | 200 (890) | 14.2 (37)           | 7.1 (18)   |
| LE120★CA201S1 | 120         | 10w/12 (no fillers)     | 0.70             | 17.8 | 177            | 264   | 600 (2670)           | 200 (890) | 14.2 (37)           | 7.1 (18)   |
| LE132★CC201S1 | 132         | 11w/12 (1 filler)       | 0.78             | 19.7 | 213            | 317   | 600 (2670)           | 200 (890) | 15.7 (40)           | 7.9 (20)   |
| LE144★CC201S1 | 144         | 12w/12 (no fillers)     | 0.78             | 19.7 | 214            | 319   | 600 (2670)           | 200 (890) | 15.7 (40)           | 7.9 (20)   |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

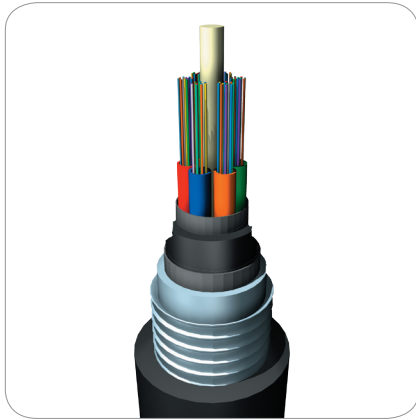
Q = Non-zero dispersion-shifted single-mode

K = SM Futureguide SR-15e Bend Insensitive

### 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.



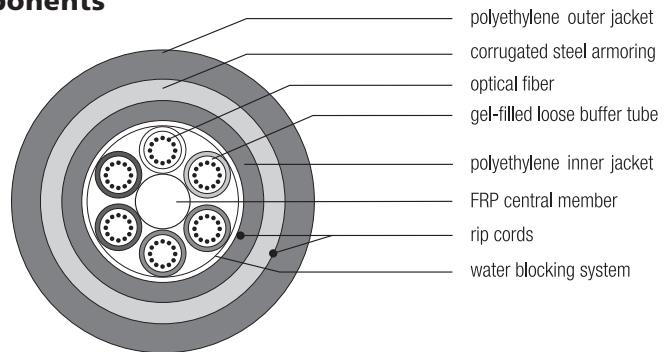
### Armored Loose Tube Cable – Double Jacket/Single Armor

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Loose Tube Double Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. With fiber counts up to 312 and S-Z strand designs for easy mid-span access, AFL' cables comply with EIA/TIA, REA/RUS PE-90 and GR-20. Industry standard designs combined with innovative technologies, such as a dry core product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Product Applications

- Long Haul Networking
- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

#### Cable Components



#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Typical Lengths

| MAXIMUM LENGTHS* |             |        |           |        |
|------------------|-------------|--------|-----------|--------|
| FIBER COUNT      | SINGLE-MODE |        | MULTIMODE |        |
|                  | FEET        | METERS | FEET      | METERS |
| 6 - 72           | 20,000      | 6,000  | 20,000    | 6,000  |
| 84 - 96          | 14,700      | 4,500  | 14,700    | 4,500  |
| 108 - 120        | 13,000      | 4,000  | 13,000    | 4,000  |
| 132 - 144        | 11,100      | 3,400  | 11,100    | 3,400  |
| 146 - 312        | 10,000      | 3,000  | 10,000    | 3,000  |

\* Longer lengths may be available upon request.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000               | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                  | 3.5                         | 1.2     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                 | 3.5                         | 1.2     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (L) 50 Laser-Link 300                      | 3.5                         | 1.2     | N/A     | N/A     | 1500                                    | 500     | 900                                          | 550     |
| (9) Single-mode                            | N/A                         | 0.4     | 0.4     | 0.3     | N/A                                     | N/A     | N/A                                          | N/A     |
| (K) SM Futureguide SR-15e Bend Insensitive | N/A                         | 0.5     | 0.5     | N/A     | 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.

## Armored Loose Tube Cable – Double Jacket/Single Armor

### 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  |
| LE006★C5111S1 | 6           | 1w/6 (4 fillers)        | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE012★C5111S1 | 12          | 1w/12 (4 fillers)       | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE018★C5111S1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE024★C5111S1 | 24          | 2w/12 (3 fillers)       | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE030★C5111S1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE036★C5111S1 | 36          | 3w/12 (2 fillers)       | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE048★C5111S1 | 48          | 4w/12 (1 filler)        | 0.59             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE060★C5111S1 | 60          | 5w/12 (no fillers)      | 0.62             | 15.0 | 128            | 190   | 600 (2670)           | 180 (800) | 12.4 (32.0)         | 5.9 (15.0) |
| LE072★C6111S1 | 72          | 6w/12 (no fillers)      | 0.62             | 15.9 | 143            | 212   | 600 (2670)           | 180 (800) | 13.0 (33.0)         | 6.5 (16.4) |
| LE084★C8111S1 | 84          | 7w/12 (1 filler)        | 0.69             | 17.6 | 169            | 252   | 600 (2670)           | 180 (800) | 14.4 (36.4)         | 7.2 (18.2) |
| LE096★C8111S1 | 96          | 8w/12 (no fillers)      | 0.69             | 17.6 | 169            | 252   | 600 (2670)           | 180 (800) | 14.4 (36.4)         | 7.2 (18.2) |
| LE108★CA111S1 | 108         | 9w/12 (1 filler)        | 0.76             | 19.3 | 201            | 299   | 600 (2670)           | 180 (800) | 15.8 (40.2)         | 7.9 (20.1) |
| LE120★CA111S1 | 120         | 10w/12 (no fillers)     | 0.76             | 19.3 | 201            | 299   | 600 (2670)           | 180 (800) | 15.8 (40.2)         | 7.9 (20.1) |
| LE132★CC111S1 | 132         | 11w/12 (1 filler)       | 0.83             | 21.2 | 234            | 348   | 600 (2670)           | 180 (800) | 18.0 (46.0)         | 9.0 (22.9) |
| LE144★CC111S1 | 144         | 12w/12 (no fillers)     | 0.83             | 21.2 | 234            | 348   | 600 (2670)           | 180 (800) | 18.0 (46.0)         | 9.0 (22.9) |
| LE216★CI311S1 | 216         | 18w/12 (no fillers)     | 0.76             | 19.4 | 189            | 281   | 600 (2670)           | 180 (800) | 15.0 (40.0)         | 7.6 (19.4) |
| LE264★CM311S1 | 264         | 22w/12 (no fillers)     | 0.81             | 20.7 | 212            | 315   | 600 (2670)           | 180 (800) | 16.0 (41.0)         | 8.0 (21.0) |
| LE288★CP311S1 | 288         | 24w/12 (no fillers)     | 0.85             | 21.7 | 236            | 351   | 600 (2670)           | 180 (800) | 17.0 (44.0)         | 8.5 (22.0) |
| LE312★CR311S1 | 312         | 26w/12 (no fillers)     | 0.91             | 23.0 | 258            | 384   | 600 (2670)           | 180 (800) | 18.0 (46.0)         | 9.0 (22.9) |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

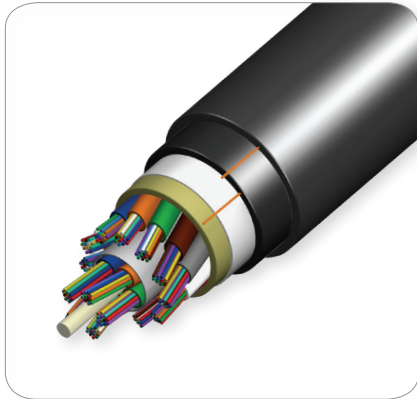
8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

Q = Non-zero dispersion-shifted single-mode

K = SM Futureguide SR-15e Bend Insensitive



### Rodent-Resistant Loose Tube Cable – Double Jacket

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.

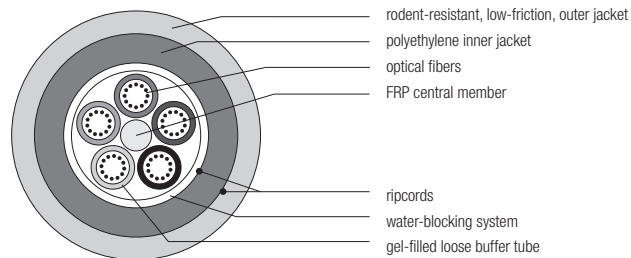
#### Applications

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

#### Temperature Range

Operating: -40°C to +70°C  
 Storage: -40°C to +75°C  
 Installation: -30°C to +70°C

#### Cable Components



#### Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|--------|-----------|--------|
|             | SINGLE-MODE      |        | MULTIMODE |        |
|             | FEET             | METERS | FEET      | METERS |
| 6 - 60      | 26,200           | 8,000  | 26,200    | 8,000  |
| 72 - 96     | 26,200           | 8,000  | 26,200    | 8,000  |
| 108 - 120   | 26,200           | 8,000  | 26,200    | 8,000  |
| 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.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000               | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                  | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                 | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (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    |
| (K) SM Futureguide SR-15e Bend Insensitive | 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.

## Rodent-Resistant Loose Tube Cable – Double Jacket

### 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 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN012★C5101N1 | 12          | 1w/12 (4 fillers)       | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN018★C5101N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN024★C5101N1 | 24          | 2w/12 (3 fillers)       | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN030★C5101N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN036★C5101N1 | 36          | 3w/12 (2 fillers)       | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN048★C5101N1 | 48          | 4w/12 (1 filler)        | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN060★C5101N1 | 60          | 5w/12 (no fillers)      | 0.49             | 12.5 | 84             | 125   | 600 (2670)           | 200 (890) | 9.8 (25)            | 4.9 (13)  |
| LN072★C6101N1 | 72          | 6w/12 (no fillers)      | 0.53             | 13.4 | 97             | 144   | 600 (2670)           | 200 (890) | 10.6 (27)           | 5.3 (14)  |
| LN084★C8101N1 | 84          | 7w/12 (1 filler)        | 0.60             | 15.2 | 121            | 180   | 600 (2670)           | 200 (890) | 12.0 (31)           | 6.0 (16)  |
| LN096★C8101N1 | 96          | 8w/12 (no fillers)      | 0.60             | 15.2 | 121            | 180   | 600 (2670)           | 200 (890) | 12.0 (31)           | 6.0 (16)  |
| LN108★CA101N1 | 108         | 9w/12 (1 filler)        | 0.67             | 17.1 | 151            | 224   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)  |
| LN120★CA101N1 | 120         | 10w/12 (no fillers)     | 0.67             | 17.1 | 151            | 224   | 600 (2670)           | 200 (890) | 13.4 (34)           | 6.7 (17)  |
| LN132★CC101N1 | 132         | 11w/12 (1 filler)       | 0.75             | 19.0 | 184            | 274   | 600 (2670)           | 200 (890) | 15.0 (38)           | 7.5 (19)  |
| LN144★CC101N1 | 144         | 12w/12 (no fillers)     | 0.75             | 19.0 | 184            | 274   | 600 (2670)           | 200 (890) | 15.0 (38)           | 7.5 (19)  |
| LN216★CI301N1 | 216         | 18w/12 (no fillers)     | 0.76             | 19.3 | 187            | 278   | 600 (2670)           | 200 (890) | 15.2 (39)           | 7.6 (20)  |
| LN288★CO301N1 | 288         | 24w/12 (no fillers)     | 0.87             | 22.0 | 234            | 348   | 600 (2670)           | 200 (890) | 17.4 (44)           | 8.7 (22)  |
| LN432★IO301N1 | 432         | 24w/18 (no fillers)     | 0.94             | 23.9 | 273            | 406   | 600 (2670)           | 200 (890) | 18.8 (48)           | 9.4 (24)  |
| LN576★OO301N1 | 576         | 24w/24 (no fillers)     | 1.07             | 27.3 | 363            | 540   | 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 corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

K = SM Futureguide SR-15e Bend Insensitive

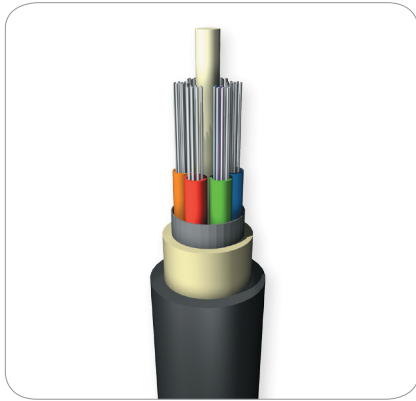
Q = Non-zero dispersion-shifted single-mode

### 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.



### FAA-Compliant Loose Tube Cable – Double Jacket

The AFL family of FAA-compliant fiber optic loose tube cables is specifically designed for airport and related installations that must comply with meet U.S. Department of Transportation Federal Aviation Administration (FAA) requirements. AFL FAA-compliant loose tube cables incorporate a highly chemical resistant Polyamide jacketing system that is ideally suited for use in pathways exposed to hydrocarbon liquids, de-icing fluids, cleaning solvents, jet fuels and other outside-plant networking applications that are typical at these facilities. AFL FAA-compliant cables are available with a variety of fiber-types including; Singlemode, multimode, bend-insensitive and hybrid (SM and MM) optical fibers.

#### Applications

- Runway communication, lighting and control
- Controltower-remotelocation networking
- Inter-terminal network connections
- Pathways exposed to corrosive solutions
- Direct burial in suitable trenched pathways

#### Standards

- FAA-E-2761, Type B
- GR-20-CORE
- TIA/EIA-568-B

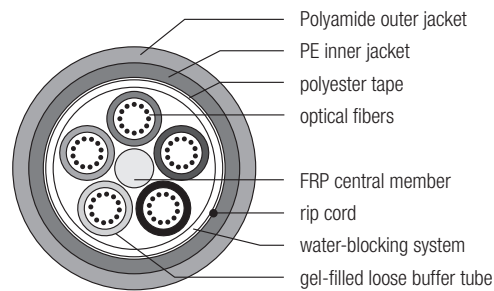
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -10°C to +70°C

#### Cable Components



#### Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|--------|-----------|--------|
|             | SINGLE-MODE      |        | MULTIMODE |        |
|             | FEET             | METERS | FEET      | METERS |
| 6 - 60      | 39,370           | 12,000 | 26,200    | 8,000  |
| 72 - 96     | 32,800           | 10,000 | 26,200    | 8,000  |
| 108 - 120   | 31,100           | 9,500  | 26,200    | 8,000  |
| 132 - 144   | 22,900           | 7,000  | 23,000    | 7,000  |

\* Longer lengths may be available upon request.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000                | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                   | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                  | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (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) SM Futureguide SR-15e Bend Insensitive  | 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.

## FAA-Compliant Loose Tube Cable – Double Jacket

### 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  |
| LG006★C5111N1 | 6           | 1w/6 (4 fillers)        | 0.46             | 11.8 | 92             | 137   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG012★C5111N1 | 12          | 1w/12 (4 fillers)       | 0.46             | 11.8 | 92             | 137   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG018★C5111N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG024★C5111N1 | 24          | 2w/12 (3 fillers)       | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG030★C5111N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG036★C5111N1 | 36          | 3w/12 (2 fillers)       | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG048★C5111N1 | 48          | 4w/12 (1 filler)        | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG060★C5111N1 | 60          | 5w/12 (no fillers)      | 0.46             | 11.8 | 96             | 143   | 600 (2670)           | 200 (890) | 9.2 (23.6)          | 4.6 (11.8) |
| LG072★C6111N1 | 72          | 6w/12 (no fillers)      | 0.50             | 12.8 | 110            | 163   | 600 (2670)           | 200 (890) | 10.0 (25.6)         | 5.0 (12.8) |
| LG084★C8111N1 | 84          | 7w/12 (1 filler)        | 0.57             | 14.6 | 129            | 191   | 600 (2670)           | 200 (890) | 11.4 (29.2)         | 5.7 (14.6) |
| LG096★C8111N1 | 96          | 8w/12 (no fillers)      | 0.57             | 14.6 | 129            | 191   | 600 (2670)           | 200 (890) | 11.4 (29.2)         | 5.7 (14.6) |
| LG108★CA111N1 | 108         | 9w/12 (1 filler)        | 0.64             | 16.3 | 149            | 221   | 600 (2670)           | 200 (890) | 12.8 (32.6)         | 6.4 (16.3) |
| LG120★CA111N1 | 120         | 10w/12 (no fillers)     | 0.64             | 16.3 | 149            | 221   | 600 (2670)           | 200 (890) | 12.8 (32.6)         | 6.4 (16.3) |
| LG132★CC111N1 | 132         | 11w/12 (1 filler)       | 0.72             | 18.3 | 204            | 303   | 600 (2670)           | 200 (890) | 14.4 (36.6)         | 7.2 (18.3) |
| LG144★CC111N1 | 144         | 12w/12 (no fillers)     | 0.72             | 18.3 | 204            | 303   | 600 (2670)           | 200 (890) | 14.4 (36.6)         | 7.2 (18.3) |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

9 = Single-mode

L = 50/125 µm multimode Laser-Link™ 300

K = SM Futureguide SR-15e Bend Insensitive

Q = Non-zero dispersion-shifted single-mode

### 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.



### Non-Armored Single Jacket Dry Loose Tube Cable

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Non-Armored Dry Loose Tube fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations. Our dry buffer tube cables feature fiber counts up to 216, compliance with EIA/TIA and REA/RUS PE-90, and are S-Z stranded for easy mid-span access. The dry buffer tube and core permit rapid cable preparation and termination. Water blocking materials are easily removed. Industry standard designs combined with innovative technologies, such as a dry core and dry tube product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

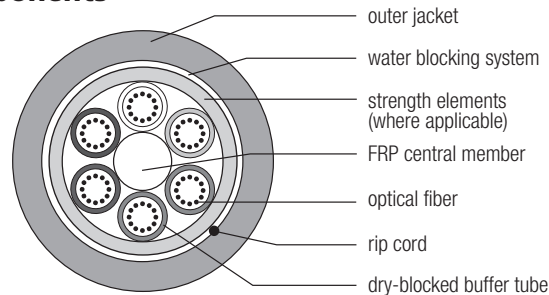
#### Temperature Range

Operating - 40°C to + 70°C

Storage - 40°C to + 75°C

Installation - 30°C to + 60°C

#### Cable Components



#### Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|--------|-----------|--------|
|             | SINGLE-MODE      |        | MULTIMODE |        |
|             | FEET             | METERS | FEET      | METERS |
| 6 - 60      | 39,370           | 12,000 | 26,200    | 8,000  |
| 72 - 96     | 32,800           | 10,000 | 26,200    | 8,000  |
| 108 - 120   | 31,100           | 9,500  | 26,200    | 8,000  |
| 132 - 144   | 22,900           | 7,000  | 22,900    | 7,000  |
| 146 - 216   | 22,900           | 7,000  | —         | —      |

\* Longer lengths may be available upon request.

#### Optical Information

| FIBER TYPE                                  | MAXIMUM ATTENUATION (dB/km) |        |        |        | OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km) |        | GIGABIT ETHERNET MIN. LINK DISTANCE (METERS) |        |
|---------------------------------------------|-----------------------------|--------|--------|--------|-----------------------------------------|--------|----------------------------------------------|--------|
|                                             | 850nm                       | 1300nm | 1310nm | 1550nm | 850nm                                   | 1300nm | 850nm                                        | 1300nm |
| (6) 62.5/125 GIGA-Link™ 300                 | 3.5                         | 1.2    | N/A    | N/A    | 200                                     | 600    | 300                                          | 550    |
| (8) 62.5/125 GIGA-Link™ 1000                | 3.5                         | 1.2    | N/A    | N/A    | 350                                     | 600    | 500                                          | 1000   |
| (5) 50/125 GIGA-Link™ 600                   | 2.9                         | 0.9    | N/A    | N/A    | 500                                     | 500    | 600                                          | 600    |
| (7) 50/125 GIGA-Link™ 2000                  | 2.9                         | 0.9    | N/A    | N/A    | 500                                     | 800    | 750                                          | 2000   |
| (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) SM Futureguide SR-15e Bend Insensitive  | 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.

## Non-Armored Single Jacket Dry Loose Tube Cable

### 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  |
| LD006★C5101N1 | 6           | 1w/6 (4 fillers)        | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD012★C5101N1 | 12          | 1w/12 (4 fillers)       | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD018★C5101N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD024★C5101N1 | 24          | 2w/12 (3 fillers)       | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD030★C5101N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD036★C5101N1 | 36          | 3w/12 (2 fillers)       | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD048★C5101N1 | 48          | 4w/12 (1 filler)        | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD060★C5101N1 | 60          | 5w/12 (No fillers)      | 0.45 (11.4)      | 53.8 (80.2)         | 600 (2700)           | 200 (890) | 9.0 (22.8)          | 4.5 (11.4) |
| LD072★C6101N1 | 72          | 6w/12 (No fillers)      | 0.49 (12.4)      | 62.6 (93.4)         | 600 (2700)           | 200 (890) | 9.8 (24.8)          | 4.9 (12.4) |
| LD084★C8101N1 | 84          | 7w/12 (1 filler)        | 0.56 (14.2)      | 80.9 (120.7)        | 600 (2700)           | 200 (890) | 11.2 (28.4)         | 5.6 (14.2) |
| LD096★C8101N1 | 96          | 8w/12 (No fillers)      | 0.56 (14.2)      | 80.9 (120.7)        | 600 (2700)           | 200 (890) | 11.2 (28.4)         | 5.6 (14.2) |
| LD108★CA101N1 | 108         | 9w/12 (1 filler)        | 0.63 (15.9)      | 101.5 (151.4)       | 600 (2700)           | 200 (890) | 12.6 (31.8)         | 6.3 (15.9) |
| LD120★CA101N1 | 120         | 10w/12 (No fillers)     | 0.63 (15.9)      | 101.5 (151.4)       | 600 (2700)           | 200 (890) | 12.6 (31.8)         | 6.3 (15.9) |
| LD132★CC101N1 | 132         | 11w/12 (1 filler)       | 0.70 (17.8)      | 127.5 (190.1)       | 600 (2700)           | 200 (890) | 14.0 (35.6)         | 7.0 (17.8) |
| LD144★CC101N1 | 144         | 12w/12 (No fillers)     | 0.70 (17.8)      | 127.5 (190.1)       | 600 (2700)           | 200 (890) | 14.0 (35.6)         | 7.0 (17.8) |
| LD216★C1301N1 | 216         | 18w/12 (No fillers)     | 0.71 (18.0)      | 116.1 (173.1)       | 600 (2700)           | 200 (890) | 14.2 (36.0)         | 7.1 (18.0) |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in part number with number corresponding to desired fiber type below.

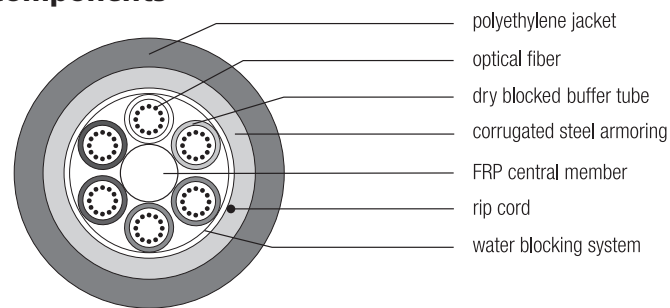
5 = 50/125µm multimode GIGA-Link™ 600  
7 = 50/125µm multimode GIGA-Link™ 2000  
6 = 62.5/125µm multimode GIGA-Link™ 300  
8 = 62.5/125µm multimode GIGA-Link™ 1000  
9 = Single-mode  
L = 50/125µm multimode Laser-Link™ 300  
K = SM Futureguide SR-15e Bend Insensitive  
Q = Non-zero dispersion-shifted single-mode



### Armored Single Jacket/Single Armor Dry Loose Tube Cable

Acting as the backbone for most of today's fiber based systems, stranded fiber optic cables play a critical role in the high speed network. AFL's Armored Dry Loose Tube Single Jacket/Single Armor fiber optic cables are designed to provide high fiber counts with the flexibility and versatility required for today's most demanding installations, including direct buried. Our dry buffer tube cables feature fiber counts up to 144, compliance with EIA/TIA and REA/RUS PE-90, and are S-Z stranded for easy mid-span access. The dry buffer tube and core permit rapid cable preparation and termination. Water blocking materials are easily removed. Industry standard designs combined with innovative technologies, such as a dry core and dry tube product, yield a world class cable that will support today's and tomorrow's technological needs.

#### Cable Components



#### Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones

#### Temperature Range

Operating - 40°C to + 70°C  
Storage - 40°C to + 75°C  
Installation - 30°C to + 60°C

#### Typical Lengths

| MAXIMUM LENGTHS* |             |        |           |        |
|------------------|-------------|--------|-----------|--------|
| FIBER COUNT      | SINGLE-MODE |        | MULTIMODE |        |
|                  | FEET        | METERS | FEET      | METERS |
| 6 - 60           | 39,370      | 12,000 | 26,200    | 8,000  |
| 72 - 96          | 32,800      | 10,000 | 26,200    | 8,000  |
| 108 - 120        | 31,100      | 9,500  | 26,200    | 8,000  |
| 132 - 144        | 22,900      | 7,000  | 22,900    | 7,000  |

\* Longer lengths may be available upon request.

#### Optical Information

| FIBER TYPE                                  | MAXIMUM ATTENUATION (dB/km) |        |        |        | OVERFILL LAUNCH MIN. BANDWIDTH (MHz•km) |        | GIGABIT ETHERNET MIN. LINK DISTANCE (METERS) |        |
|---------------------------------------------|-----------------------------|--------|--------|--------|-----------------------------------------|--------|----------------------------------------------|--------|
|                                             | 850nm                       | 1300nm | 1310nm | 1550nm | 850nm                                   | 1300nm | 850nm                                        | 1300nm |
| (6) 62.5/125 GIGA-Link™ 300                 | 3.5                         | 1.2    | N/A    | N/A    | 200                                     | 600    | 300                                          | 550    |
| (8) 62.5/125 GIGA-Link™ 1000                | 3.5                         | 1.2    | N/A    | N/A    | 350                                     | 600    | 500                                          | 1000   |
| (5) 50/125 GIGA-Link™ 600                   | 2.9                         | 0.9    | N/A    | N/A    | 500                                     | 500    | 600                                          | 600    |
| (7) 50/125 GIGA-Link™ 2000                  | 2.9                         | 0.9    | N/A    | N/A    | 500                                     | 800    | 750                                          | 2000   |
| (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) SM Futureguide SR-15e Bend Insensitive  | 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.

## Armored Single Jacket/Single Armor Dry Loose Tube Cable

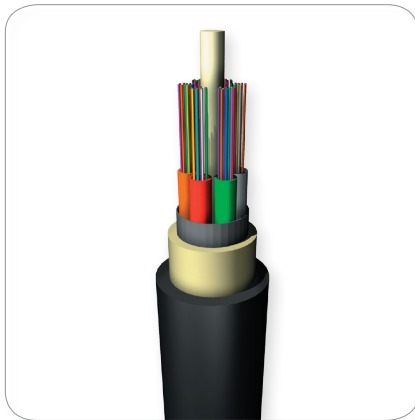
### Ordering Information

| 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  |
| LD006★C5201S1 | 6           | 1w/6 (4 fillers)        | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD012★C5201S1 | 12          | 1w/12 (4 fillers)       | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD018★C5201S1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD024★C5201S1 | 24          | 2w/12 (3 fillers)       | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD030★C5201S1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD036★C5201S1 | 36          | 3w/12 (2 fillers)       | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD048★C5201S1 | 48          | 4w/12 (1 filler)        | 0.52 (13.2)      | 94 (140))           | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD060★C5201S1 | 60          | 5w/12 (No fillers)      | 0.52 (13.2)      | 94 (140)            | 600 (2700)           | 180 (800) | 10.4 (26.4)         | 5.2 (13.2) |
| LD072★C6201S1 | 72          | 6w/12 (No fillers)      | 0.55 (14.0)      | 108 (161)           | 600 (2700)           | 180 (800) | 11.0 (28.0)         | 5.5 (14.0) |
| LD084★C8201S1 | 84          | 7w/12 (1 filler)        | 0.62 (15.8)      | 130 (193)           | 600 (2700)           | 180 (800) | 12.4 (31.6)         | 6.2 (15.8) |
| LD096★C8201S1 | 96          | 8w/12 (No fillers)      | 0.62 (15.8)      | 130 (193)           | 600 (2700)           | 180 (800) | 12.4 (31.6)         | 6.2 (15.8) |
| LD108★CA201S1 | 108         | 9w/12 (1 filler)        | 0.70 (17.7)      | 159 (237)           | 600 (2700)           | 180 (800) | 14.0 (35.4)         | 7.0 (17.7) |
| LD120★CA201S1 | 120         | 10w/12 (No fillers)     | 0.70 (17.7)      | 159 (237)           | 600 (2700)           | 180 (800) | 14.0 (35.4)         | 7.0 (17.7) |
| LD132★CC201S1 | 132         | 11w/12 (1 filler)       | 0.77 (19.6)      | 192 (285)           | 600 (2700)           | 180 (800) | 15.4 (39.2)         | 7.7 (19.6) |
| LD144★CC201S1 | 144         | 12w/12 (No fillers)     | 0.77 (19.6)      | 192 (285)           | 600 (2700)           | 180 (800) | 15.4 (39.2)         | 7.7 (19.6) |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in part number with number corresponding to desired fiber type below.

5 = 50/125µm multimode GIGA-Link™ 600  
7 = 50/125µm multimode GIGA-Link™ 2000  
6 = 62.5/125µm multimode GIGA-Link™ 300  
8 = 62.5/125µm multimode GIGA-Link™ 1000  
9 = Single-mode  
L = 50/125µm multimode Laser-Link™ 300  
K = SM Futureguide SR-15e Bend Insensitive  
Q = Non-zero dispersion-shifted single-mode



### Indoor/Outdoor Loose Tube Cable

Indoor/outdoor stranded loose tube combines the robust mechanical and environmental characteristics of an outside plant cable with the flexibility of an inside plant riser cable. By installing indoor/outdoor stranded loose tube, costly splice locations entering into a building are avoided, being routed directly from the outside plant to telecommunications closets, or main distribution frames (MDF) through the riser of a building and eliminating the "50-foot rule." Indoor/Outdoor Stranded Design loose tube cable is moisture and U.V. resistant, S-Z stranded for easy mid-span access, listed for OFNR use per UL standards, and can be used in both duct and lashed applications.

#### Applications

- Building Interconnections (Campus LAN)
- Trunking Lines Direct to Telecommunications Closet
- Local Loop
- Distance Learning
- Distribution
- Intrabuilding Backbones
- MSHA Approved for Mining Applications

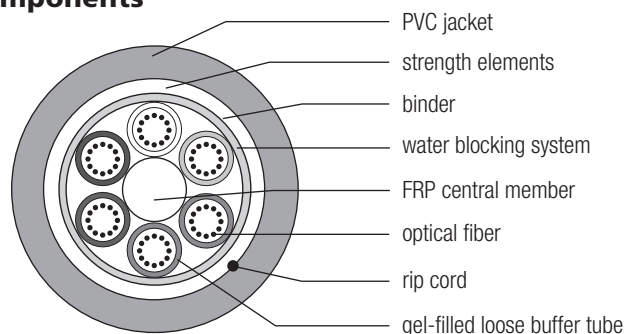
#### Temperature Range

Operating -40°C to +70°C

Storage -40°C to +75°C

Installation -30°C to +70°C

#### Cable Components



#### Typical Lengths

| MAXIMUM LENGTHS* |             |        |           |        |
|------------------|-------------|--------|-----------|--------|
| FIBER COUNT      | SINGLE-MODE |        | MULTIMODE |        |
|                  | FEET        | METERS | FEET      | METERS |
| 6 - 144          | 22,900      | 7,000  | 22,900    | 7,000  |

\* Longer lengths may be available.

#### Optical Information

| 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     |
| (8) 62.5/125 GIGA-Link™ 1000                             | 3.5                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                                | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                               | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (L) 50 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    |
| (K) SM Futureguide SR-15e Bend Insensitive (ITU G.657.A) | 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.

## Indoor/Outdoor Loose Tube Cable

### Ordering Information

| AFL NO.       | FIBER COUNT | NUMBER OF TUBES/FIBERS  | NOMINAL DIAMETER | NOMINAL WEIGHT       | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |           |
|---------------|-------------|-------------------------|------------------|----------------------|----------------------|-----------|---------------------|-----------|
|               |             |                         | INCHES (MM)      | LBS/1,000 FT (KG/KM) | LBS. (N)             |           | INCHES (CM)         |           |
|               |             |                         |                  |                      | SHORT TERM           | LONG TERM | SHORT TERM          | LONG TERM |
| LV006★C5101N1 | 6           | 1w/6 (4 fillers)        | 0.51 (12.9)      | 107 (159)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV012★C5101N1 | 12          | 1w/12 (4 fillers)       | 0.51 (12.9)      | 108 (160)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV018★C5101N1 | 18          | 1w/12, 1w/6 (3 fillers) | 0.51 (12.9)      | 108 (161)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV024★C5101N1 | 24          | 2w/12 (3 fillers)       | 0.51 (12.9)      | 108 (161)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV030★C5101N1 | 30          | 2w/12, 1w/6 (2 fillers) | 0.51 (12.9)      | 109 (162)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV036★C5101N1 | 36          | 3w/12 (2 fillers)       | 0.51 (12.9)      | 109 (162)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV048★C5101N1 | 48          | 4w/12 (1 filler)        | 0.51 (12.9)      | 110 (164)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV060★C5101N1 | 60          | 5w/12 (No fillers)      | 0.51 (12.9)      | 111 (165)            | 600 (2700)           | 200 (890) | 10.2 (26)           | 5.1 (13)  |
| LV072★C6101N1 | 72          | 6w/12 (No fillers)      | 0.54 (13.7)      | 128 (190)            | 600 (2700)           | 200 (890) | 10.8 (28)           | 5.4 (14)  |
| LV084★C8101N1 | 84          | 7w/12 (1 filler)        | 0.61 (15.5)      | 158 (236)            | 600 (2700)           | 200 (890) | 12.2 (31)           | 6.1 (16)  |
| LV096★C8101N1 | 96          | 8w/12 (No fillers)      | 0.61 (15.5)      | 159 (237)            | 600 (2700)           | 200 (890) | 12.2 (31)           | 6.1 (16)  |
| LV108★CA101N1 | 108         | 9w/12 (1 filler)        | 0.69 (17.4)      | 197 (294)            | 600 (2700)           | 200 (890) | 14.0 (35)           | 7.0 (18)  |
| LV120★CA101N1 | 120         | 10w/12 (No fillers)     | 0.69 (17.4)      | 198 (295)            | 600 (2700)           | 200 (890) | 14.0 (35)           | 7.0 (18)  |
| LV132★CC101N1 | 132         | 11w/12 (1 filler)       | 0.76 (19.3)      | 242 (360)            | 600 (2700)           | 200 (890) | 15.2 (39)           | 7.6 (20)  |
| LV144★CC101N1 | 144         | 12w/12 (No fillers)     | 0.76 (19.3)      | 243 (361)            | 600 (2700)           | 200 (890) | 15.2 (39)           | 7.6 (20)  |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

K = SM Futureguide SR-15e Bend Insensitive

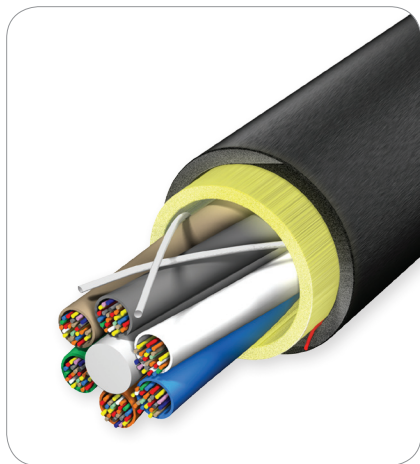
Q = Non-zero dispersion-shifted single-mode

### 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.



### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

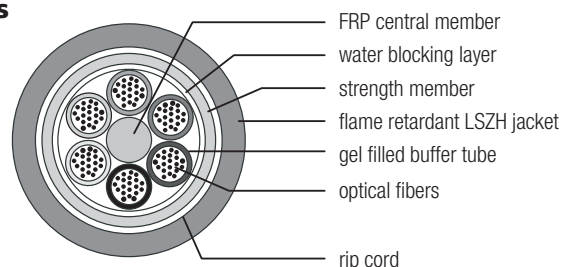
Installation: -20°C to +60°C

## Low Smoke Zero Halogen Loose Tube Cable OFN-LS Listed and Non-Listed

AFL's Low Smoke Zero Halogen (LSZH) Loose Tube cable is designed for use in outdoor aerial and indoor duct applications including subways and tunnels with requirements for limited smoke and zero halogen. Optical fibers are located within S-Z standard buffer tubes, providing stable and reliable long-term performance. The cable is dry-blocked (no messy gel flooding the core) to prevent axial flow of moisture and utilizes a flame-retardant, non-halogenated UV-resistant outer jacket.

AFL's Low Smoke Zero Halogen (LSZH) loose tube cable group includes OFN-LS Listed as well as non-listed designs. The OFN-LS listed loose tube cable line (LL-Series) is specially engineered for applications that require UL/NEC compliant cables intended for inside-building applications and must meet minimum flame and smoke generation guideline. The Non-Listed cables are also constructed with LSZH materials and are intended for OSP installations where NFPA/NEC listing is not required.

### Cable Components



### Typical Lengths

| FIBER COUNT | MAXIMUM LENGTHS* |        |           |        |
|-------------|------------------|--------|-----------|--------|
|             | SINGLE-MODE      |        | MULTIMODE |        |
|             | FEET             | METERS | FEET      | METERS |
| 2 - 12      | 39,370           | 12,000 | 20,200    | 6,100  |
| 18 - 96     | 32,800           | 10,000 | 26,200    | 8,000  |
| 108 - 120   | 31,100           | 9,500  | 26,200    | 8,000  |
| 132 - 144   | 22,900           | 7,000  | 26,200    | 8,000  |

\* Longer lengths may be available upon request.

### Optical Information

| 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                | 3.2                         | 1.2     | N/A     | N/A     | 200                                     | 600     | 300                                          | 550     |
| (8) 62.5/125 GIGA-Link™ 1000               | 3.2                         | 1.2     | N/A     | N/A     | 350                                     | 600     | 500                                          | 1000    |
| (5) 50/125 GIGA-Link™ 600                  | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 500     | 600                                          | 600     |
| (7) 50/125 GIGA-Link™ 2000                 | 2.9                         | 0.9     | N/A     | N/A     | 500                                     | 800     | 750                                          | 2000    |
| (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    |
| (K) SM Futureguide SR-15e Bend Insensitive | 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.

## Low Smoke Zero Halogen Loose Tube Cable OFN-LS Listed and Non-Listed

### Ordering Information

| AFL NO.                                   | FIBER COUNT | NUMBER OF TUBES/FIBERS | NOMINAL DIAMETER |      | NOMINAL WEIGHT |       | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |            |
|-------------------------------------------|-------------|------------------------|------------------|------|----------------|-------|----------------------|-----------|---------------------|------------|
|                                           |             |                        | INCHES           | MM   | LBS/1,000 FT   | KG/KM | LBS (N)              |           | INCHES (CM)         |            |
|                                           |             |                        |                  |      |                |       | SHORT TERM           | LONG TERM | SHORT TERM          | LONG TERM  |
| NON-ARMORED, SINGLE JACKET, OFN-LS LISTED |             |                        |                  |      |                |       |                      |           |                     |            |
| LL006★C5101N1                             | 6           | 1w/6 (4 fillers)       | 0.47             | 11.9 | 92             | 137   | 600 (2670)           | 180 (800) | 9.4 (24)            | 4.7 (12)   |
| LL012★C5101N1                             | 12          | 1w/12 (4 fillers)      | 0.47             | 11.9 | 92             | 137   | 600 (2670)           | 180 (800) | 9.4 (24)            | 4.7 (12)   |
| LL024★C5101N1                             | 24          | 2w/12 (3 fillers)      | 0.47             | 11.9 | 91             | 136   | 600 (2670)           | 180 (800) | 9.4 (24)            | 4.7 (12)   |
| LL036★C5101N1                             | 36          | 3w/12 (2 fillers)      | 0.47             | 11.9 | 91             | 136   | 600 (2670)           | 180 (800) | 9.4 (24)            | 4.7 (12)   |
| LL048★C5101N1                             | 48          | 4w/12 (1 filler)       | 0.47             | 11.9 | 90             | 134   | 600 (2670)           | 180 (800) | 9.4 (24)            | 4.7 (12)   |
| LL072★C6101N1                             | 72          | 6w/12 (no fillers)     | 0.510            | 12.8 | 92             | 137   | 600 (2670)           | 180 (800) | 10.2 (26)           | 5.1 (13)   |
| LL096★C8101N1                             | 96          | 8w/12 (no fillers)     | 0.571            | 14.5 | 118            | 175   | 600 (2670)           | 180 (800) | 11.4 (29)           | 5.7 (15)   |
| LL144★CC101N1                             | 144         | 12w/12 (no fillers)    | 0.720            | 18.3 | 185            | 275   | 600 (2670)           | 180 (800) | 14.4 (37)           | 7.2 (19)   |
| NON-ARMORED, SINGLE JACKET, NON- LISTED   |             |                        |                  |      |                |       |                      |           |                     |            |
| LF006★C5101N1                             | 6           | 1w/6 (4 fillers)       | 0.469            | 11.9 | 103            | 154   | 600 (2670)           | 180 (800) | 9.4 (23.8)          | 4.7 (11.9) |
| LF012★C5101N1                             | 12          | 1w/12 (4 fillers)      | 0.469            | 11.9 | 103            | 154   | 600 (2670)           | 180 (800) | 9.4 (23.8)          | 4.7 (11.9) |
| LF024★C5101N1                             | 24          | 2w/12 (3 fillers)      | 0.469            | 11.9 | 102            | 152   | 600 (2670)           | 180 (800) | 9.4 (23.8)          | 4.7 (11.9) |
| LF036★C5101N1                             | 36          | 3w/12 (2 fillers)      | 0.469            | 11.9 | 101            | 150   | 600 (2670)           | 180 (800) | 9.4 (23.8)          | 4.7 (11.9) |
| LF048★C5101N1                             | 48          | 4w/12 (1 filler)       | 0.469            | 11.9 | 99             | 148   | 600 (2670)           | 180 (800) | 9.4 (23.8)          | 4.7 (11.9) |
| LF072★C6101N1                             | 72          | 6w/12 (no fillers)     | 0.500            | 12.7 | 111            | 166   | 600 (2670)           | 180 (800) | 10.0 (25.4)         | 5.0 (12.7) |
| LF096★C8101N1                             | 96          | 8w/12 (no fillers)     | 0.571            | 14.5 | 143            | 212   | 600 (2670)           | 180 (800) | 11.4 (29.0)         | 5.7 (14.5) |
| LF144★CC101N1                             | 144         | 12w/12 (no fillers)    | 0.720            | 18.3 | 227            | 338   | 600 (2670)           | 180 (800) | 14.4 (36.6)         | 7.2 (18.3) |

#### NOTES:

1. Diameter and weight subject to change without notice.
2. For other types of LSZH Cables: Double Jacket, Non-Armored; Single Jacket, Single Armor; Double Jacket, Single Armor and higher fiber counts in non-armored, please contact your AFL' Representative.

★ Fiber Types-Replace asterisk (★) in AFL number with number corresponding to desired fiber type below

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

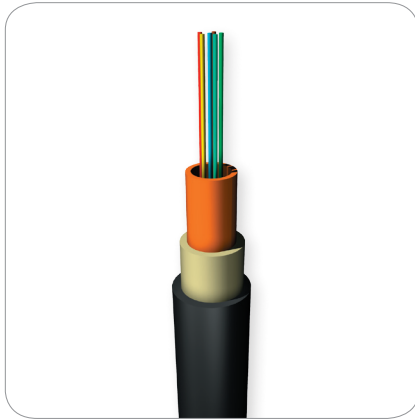
Q = Non-zero dispersion-shifted single-mode

K = SM Futureguide SR-15e Bend Insensitive

### 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 |

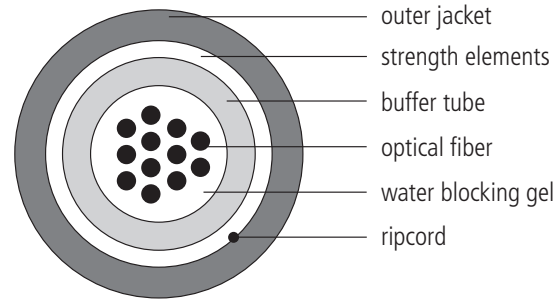
AFL typically provides Loose Tube cable on several standard sizes of non-returnable wooden reels. Non-standard reel sizes are available upon request. Larger reel sizes may be required to accommodate long cable lengths.



### Uniflex® Non-Armored Loose Tube Cable

AFL's non-armored Uniflex® is a central loose tube cable used for duct and low fiber drop applications.

#### Cable Components



#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Product Applications

- Service (Drop) Cables
- Building Interconnections (Campus LAN)
- Connectorized Trunking Cables
- Distance Learning
- Distribution

#### Maximum Lengths

| NOMINAL<br>DIAMETER | REEL A<br>(42 x 32 x 23) |        | REEL B<br>(58 x 32 x 28) |        |
|---------------------|--------------------------|--------|--------------------------|--------|
|                     | MM                       | FEET   | FEET                     | METERS |
| 7.8                 |                          | 19,000 | 27,500                   | 8,400  |

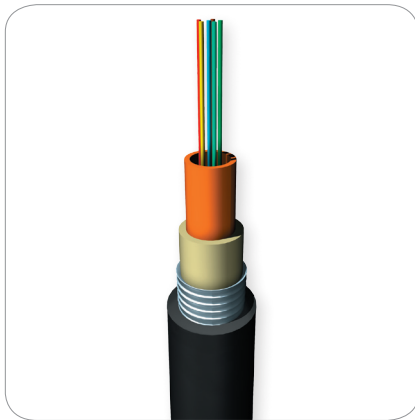
#### Ordering Information

| AFL NO.       | FIBER<br>COUNT | NOMINAL DIAMETER<br>INCHES (MM) | NOMINAL WEIGHT<br>LBS/1,000FT (KG/KM) | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |           |
|---------------|----------------|---------------------------------|---------------------------------------|----------------------|-----------|---------------------|-----------|
|               |                |                                 |                                       | LBS (N)              |           | INCHES (CM)         |           |
|               |                |                                 |                                       | SHORT TERM           | LONG TERM | SHORT TERM          | LONG TERM |
| LE002★21100N1 | 2              | 0.31 (7.8)                      | 34 (50)                               | 600 (2670)           | 200 (890) | 6.3 (16.0)          | 3.1 (8.0) |
| LE004★41100N1 | 4              |                                 |                                       |                      |           |                     |           |
| LE006★61100N1 | 6              |                                 |                                       |                      |           |                     |           |
| LE008★81100N1 | 8              |                                 |                                       |                      |           |                     |           |
| LE010★A1100N1 | 10             |                                 |                                       |                      |           |                     |           |
| LE012★C1100N1 | 12             |                                 |                                       |                      |           |                     |           |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600  
 7 = 50/125 µm multimode GIGA-Link™ 2000  
 6 = 62.5/125 µm multimode GIGA-Link™ 300  
 8 = 62.5/125 µm multimode GIGA-Link™ 1000  
 L = 50/125 µm multimode Laser-Link™ 300  
 9 = Single-mode  
 Q = Non-zero dispersion-shifted single-mode  
 K = SM Futureguide SR-15e Bend Insensitive



### Uniflex® Armored Loose Tube Cable

AFL's Armored Uniflex cable is a central loose tube product used in various outside plant applications. Its compact design holds up to 12 fibers. The corrugated steel armor provides additional mechanical protection and also serves as toneable element within the cable.

#### Product Applications

- Service (Drop) Cables
- Building Interconnections (Campus LAN)
- Connectorized Trunking Cables
- Distance Learning
- Distribution

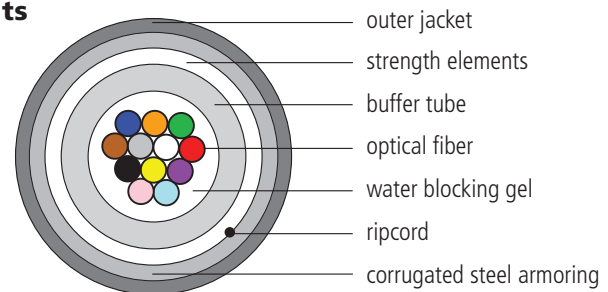
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Cable Components



#### Maximum Lengths

| NOMINAL<br>DIAMETER | REEL A<br>(42 x 32 x 23) |       | REEL B<br>(58 x 32 x 28) |        | REEL C<br>(66 x 36 x 36) |        |
|---------------------|--------------------------|-------|--------------------------|--------|--------------------------|--------|
|                     | MM                       | FEET  | METERS                   | FEET   | METERS                   | FEET   |
| 12.2                |                          | 7,700 | 2,345                    | 18,250 | 5,560                    | 24,400 |
|                     |                          |       |                          |        |                          | 7,435  |

\* Maximum length of 27,500 feet available on larger reels.

#### Ordering Information

| AFL NO.       | FIBER<br>COUNT | NOMINAL DIAMETER<br>INCHES (MM) | NOMINAL WEIGHT<br>LBS/1,000FT (KG/KM) | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |            |
|---------------|----------------|---------------------------------|---------------------------------------|----------------------|-----------|---------------------|------------|
|               |                |                                 |                                       | LBS (N)              |           | INCHES (CM)         |            |
|               |                |                                 |                                       | SHORT TERM           | LONG TERM | SHORT TERM          | LONG TERM  |
| LE002★21200S1 | 2              | 0.48 (12.2)                     | 95 (140)                              | 600 (2670)           | 200 (890) | 9.6 (25.0)          | 4.8 (13.0) |
| LE004★41200S1 | 4              |                                 |                                       |                      |           |                     |            |
| LE006★61200S1 | 6              |                                 |                                       |                      |           |                     |            |
| LE008★81200S1 | 8              |                                 |                                       |                      |           |                     |            |
| LE010★A1200S1 | 10             |                                 |                                       |                      |           |                     |            |
| LE012★C1200S1 | 12             |                                 |                                       |                      |           |                     |            |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

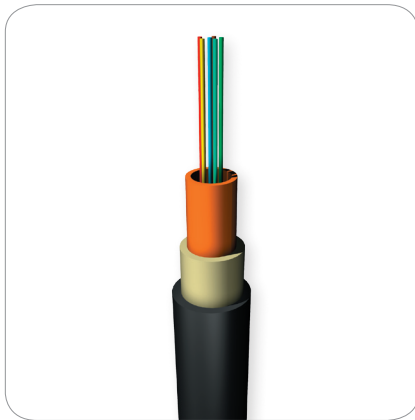
8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

Q = Non-zero dispersion-shifted single-mode

K = SM Futureguide SR-15e Bend Insensitive



### Uniflex® Indoor/Outdoor Loose Tube Cable

Single tube products allow for installations that require a high degree of flexibility combined with a small cable diameter. AFL has designed a cable that has all the characteristics of stranded loose tube cables from a mechanical and environmental standpoint, combined with the high flexibility and small diameter requirements of real world installations. This cable is the ultimate solution for flexible, connectorized applications, as well as crowded ducts in existing fiber applications, and can be lashed to an aerial messenger. Uniflex Indoor/Outdoor cable not only services the outside plant environment, but also qualifies as an Indoor/Outdoor cable, allowing potential cost savings with fewer splice points. Uniflex Indoor/Outdoor complies with EIA/TIA standards and is listed for OFNR use per UL standards.

#### Product Applications

- OFNR
- Service (Drop) Cables
- Building Interconnections (Campus LAN)
- Connectorized Trunking Cables
- Distance Learning
- Distribution
- MSHA Approved for Mining Applications

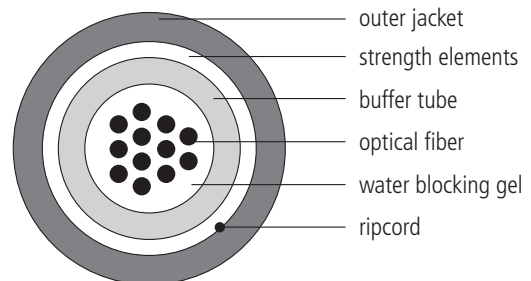
#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Cable Components



#### Maximum Lengths

| NOMINAL<br>DIAMETER | REEL A<br>(42 x 36 x 23) |        | REEL B<br>(58 x 36 x 28) |        |
|---------------------|--------------------------|--------|--------------------------|--------|
|                     | FEET                     | METERS | FEET                     | METERS |
| 8.4                 | 16,400                   | 4,995  | 27,500                   | 8,400  |

#### Ordering Information

| AFL NO.       | FIBER COUNT | NOMINAL<br>DIAMETER |       | NOMINAL<br>WEIGHT |         | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |           |
|---------------|-------------|---------------------|-------|-------------------|---------|----------------------|-----------|---------------------|-----------|
|               |             | INCHES              | (MM)  | LBS/1000FT        | (KG/KM) | LBS (N)              |           | INCHES (CM)         |           |
| LV002★21100N1 | 2           | 0.33                | (8.4) | 50                | (75)    | 600 (2670)           | 200 (890) | 6.7 (17.0)          | 3.5 (9.0) |
| LV004★41100N1 | 4           |                     |       |                   |         |                      |           |                     |           |
| LV006★61100N1 | 6           |                     |       |                   |         |                      |           |                     |           |
| LV008★81100N1 | 8           |                     |       |                   |         |                      |           |                     |           |
| LV010★A1100N1 | 10          |                     |       |                   |         |                      |           |                     |           |
| LV012★C1100N1 | 12          |                     |       |                   |         |                      |           |                     |           |

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600

7 = 50/125 µm multimode GIGA-Link™ 2000

6 = 62.5/125 µm multimode GIGA-Link™ 300

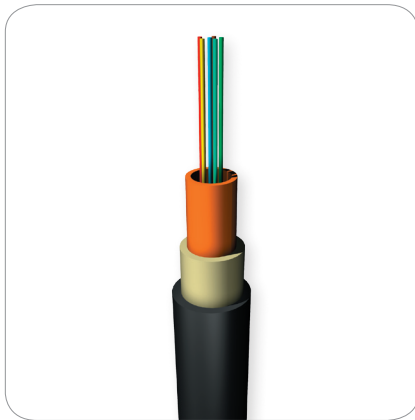
8 = 62.5/125 µm multimode GIGA-Link™ 1000

L = 50/125 µm multimode Laser-Link™ 300

9 = Single-mode

Q = Non-zero dispersion-shifted single-mode

K = SM Futureguide SR-15e Bend Insensitive



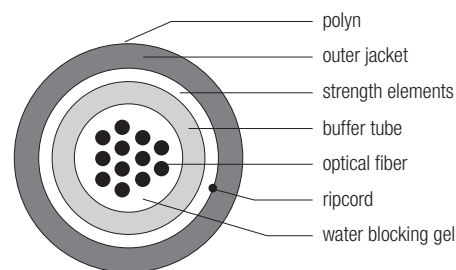
### Heavy Duty Uniflex® Loose Tube Cable

AFL's Heavy Duty Uniflex loose tube cable features a central tube design and thicker-walled jacket. Often used in connectorized cable assemblies, it holds up to 12 fibers.

#### Product Applications

- Service (Drop) Cables
- Building Interconnections (Campus LAN)
- Connectorized Trunking Cables
- Distance Learning
- Distribution

#### Cable Components



#### Temperature Range

Operating: -40°C to +70°C

Storage: -40°C to +75°C

Installation: -30°C to +70°C

#### Ordering Information

| AFL NO.       | FIBER COUNT | NOMINAL DIAMETER<br>INCHES (MM) | NOMINAL WEIGHT<br>LBS/1,000FT (KG/KM) | MAXIMUM TENSILE LOAD |           | MINIMUM BEND RADIUS |           |
|---------------|-------------|---------------------------------|---------------------------------------|----------------------|-----------|---------------------|-----------|
|               |             |                                 |                                       | LBS. (N)             |           | INCHES (CM)         |           |
|               |             |                                 |                                       | SHORT TERM           | LONG TERM | SHORT TERM          | LONG TERM |
| LU002★21200N1 | 2           | 0.366 (9.3)                     | 40 (65)                               | 600 (2670)           | 200 (890) | 7.5 (19.0)          | 3.7 (9.5) |
| LU004★41200N1 | 4           |                                 |                                       |                      |           |                     |           |
| LU006★61200N1 | 6           |                                 |                                       |                      |           |                     |           |
| LU008★81200N1 | 8           |                                 |                                       |                      |           |                     |           |
| LU010★A1200N1 | 10          |                                 |                                       |                      |           |                     |           |
| LU012★C1200N1 | 12          |                                 |                                       |                      |           |                     |           |

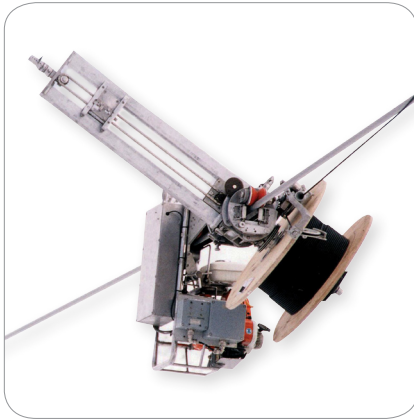
Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in AFL number with number corresponding to desired fiber type below.

5 = 50/125 µm multimode GIGA-Link™ 600  
 6 = 62.5/125 µm multimode GIGA-Link™ 300  
 7 = 50/125 µm multimode GIGA-Link™ 2000  
 8 = 62.5/125 µm multimode GIGA-Link™ 1000  
 L = 50/125 µm multimode Laser-Link™ 300  
 9 = Single-mode  
 Q = Non-zero dispersion-shifted single-mode  
 K = SM Futureguide SR-15e Bend Insensitive

#### Maximum Lengths

| NOMINAL DIAMETER | REEL A<br>(42 x 36 x 23) |        | REEL B<br>(58 x 36 x 28) |        |
|------------------|--------------------------|--------|--------------------------|--------|
|                  | MM                       | FEET   | FEET                     | METERS |
| 7.8              |                          | 19,000 | 5,790                    | 27,500 |
| 9.3              |                          | 13,300 | 4,050                    | 27,500 |



### SkyWrap®

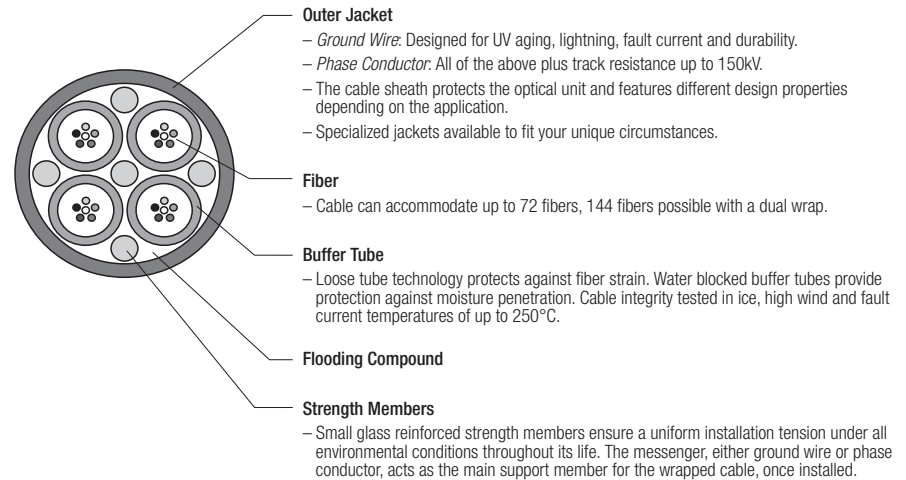
Successfully installed worldwide since 1982, SkyWrap® is a fiber optic cable helically applied on ground wires or phase conductors. A specially designed spinning machine is used to wrap the cable under controlled conditions. This system offers a complete communication link designed and engineered for high-voltage environments at low cost.

SkyWrap is the ideal solution when access to the overhead line is problematic. The installation equipment is lightweight and easy to handle. And, with SkyWrap there's no need to de-energize the line. The cable can be wrapped on the ground wire under live-line conditions.

### Features

- Quick, cost effective installation
- Utilize existing power line infrastructure
- Use where access is limited (e.g. mountains and river crossings)
- Use for both earth-wires and phase conductors
- Live line installations on earth-wire
- Complete lifetime turn-key solutions
- Over 20 years installation experience

### Cable Components



### Ordering Information

| AFL NO.                                         | FIBER COUNT | CABLE O.D. (INCHES) | WEIGHT (LB/KFT) | LENGTH PER REEL (FT) | CASSETTE LENGTH (FT) |
|-------------------------------------------------|-------------|---------------------|-----------------|----------------------|----------------------|
| <b>SW-NCA4-★ (STANDARD EARTHWIRE)</b>           |             |                     |                 |                      |                      |
| SW-nCA4-★                                       | 4 to 24     | 0.248               | 20.83           | 8266                 | 16532                |
| SW-nCA4-★                                       | 26 to 48    | 0.276               | 25.53           | 6696                 | 13392                |
| SW-nCA4-★                                       | 50 to 64    | 0.303               | 31.58           | 5533                 | 11066                |
| SW-nCA4-★                                       | 66 to 72    | 0.319               | 34.94           | 5000                 | 10000                |
| <b>SW-NJM4-★ (BUCKSHOT RESISTANT EARTHWIRE)</b> |             |                     |                 |                      |                      |
| SW-nJM4-★                                       | 4 to 24     | 0.283               | 32.93           | 6329                 | 12657                |
| SW-nJM4-★                                       | 26 to 48    | 0.311               | 39.65           | 5258                 | 10515                |
| SW-nJM4-★                                       | 50 to 64    | 0.339               | 47.04           | 4436                 | 8871                 |
| SW-nJM4-★                                       | 66 to 72    | 0.354               | 51.07           | 4050                 | 8100                 |

n = number of fibers required

Note: Diameter and weight subject to change without notice

★ Fiber Types – Replace asterisk (★) in part number with number corresponding to desired fiber type below.

5 = 50/125µm multimode GIGA-Link™ 600

7 = 50/125µm multimode GIGA-Link™ 2000

6 = 62.5/125µm multimode GIGA-Link™ 300

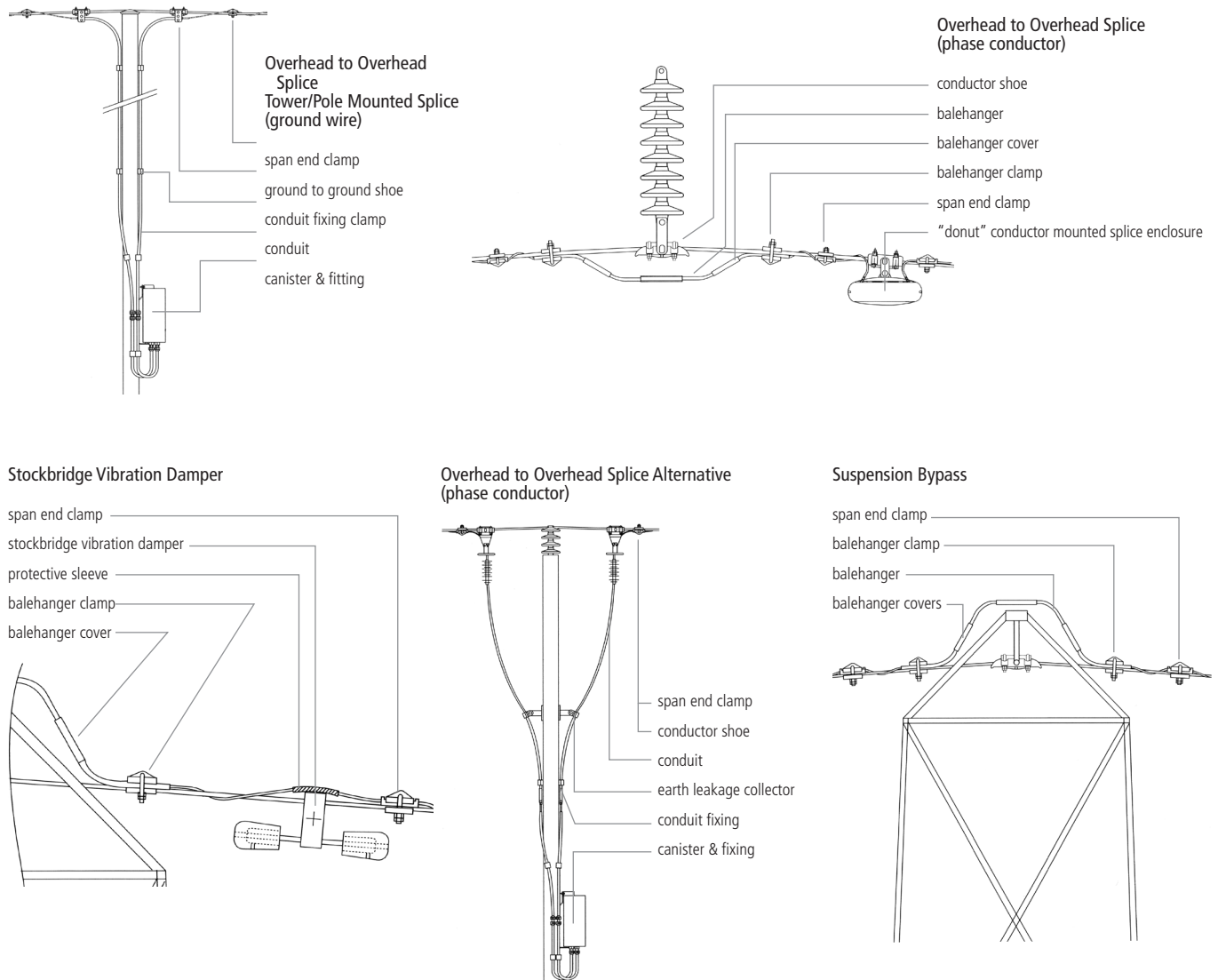
8 = 62.5/125µm multimode GIGA-Link™ 1000

L = 50/125µm multimode Laser-Link™ 300

9 = Single-mode

### SkyWrap®

#### Installation Hardware



## Reel and Packaging Information

| REEL TYPE | FL   | TR  | DR  | OW  | TARE  | FL   | TR | DR | OW     | TARE  |
|-----------|------|-----|-----|-----|-------|------|----|----|--------|-------|
|           | (CM) |     |     |     | (KGS) | (IN) |    |    |        | (LBS) |
| Wood      | 147  | 81  | 71  | 97  | 182   | 58   | 32 | 28 | 38~450 | 434   |
| Wood      | 168  | 91  | 91  | 107 | 266   | 66   | 36 | 36 | 42~600 | 574   |
| Wood      | 183  | 91  | 91  | 107 | 363   | 72   | 36 | 36 | 42~700 | 661   |
| Wood      | 213  | 86  | 89  | 104 | 425   | 84   | 34 | 35 | 41~875 | 847   |
| Steel     | 183  | 91  | 102 | 107 | 245   | 72   | 36 | 40 | 42     | 540   |
| Steel     | 213  | 114 | 107 | 130 | 377   | 84   | 45 | 42 | 51     | 773   |

- **FL** - Flange Diameter; **TR** - Inside Traverse Width; **DR** - Drum Diameter; **OW** - Outside Overall Width
- Arbor Hole Diameter: Wood: 3-1/8in (7.9cm)  
Steel: 3in (7.6cm)
- Ordered lengths should include a distribution of lengths, i.e., all reels cannot be ordered at the maximum.  
A typical reel length distribution is as follows:
  - 6000m – 7000m ~ 15% of reels
  - 4500m – 6000m ~ 55% of reels
  - 2500m – 4500m ~ 25% of reels
  - < 2500m ~ 5% of reels
- Wood reels with flex-wrap covering are standard. Non-returnable steel reels and/or wood lagging are available upon request.  
Additional reel sizes may be available upon request.
- Steel reels are recommended for long term storage (74 months). Reference AFL's "Fiber Optic Cable Receiving, Handling and Storage" document for additional information.

Please Contact your AFL Sales Rep for information  
about any of our other products or services.

## TEST AND INSPECTION



OLS4



C860



OPM5

## FIBER INSIDE PLANT



FuseConnect™ Connectors



XFM®-HD 4RU

Along with a broad range of products, we also offer professional training through The Light Brigade. Over 40,000 people have completed a Light Brigade training course making us the leading fiber optic training provider in the world.



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