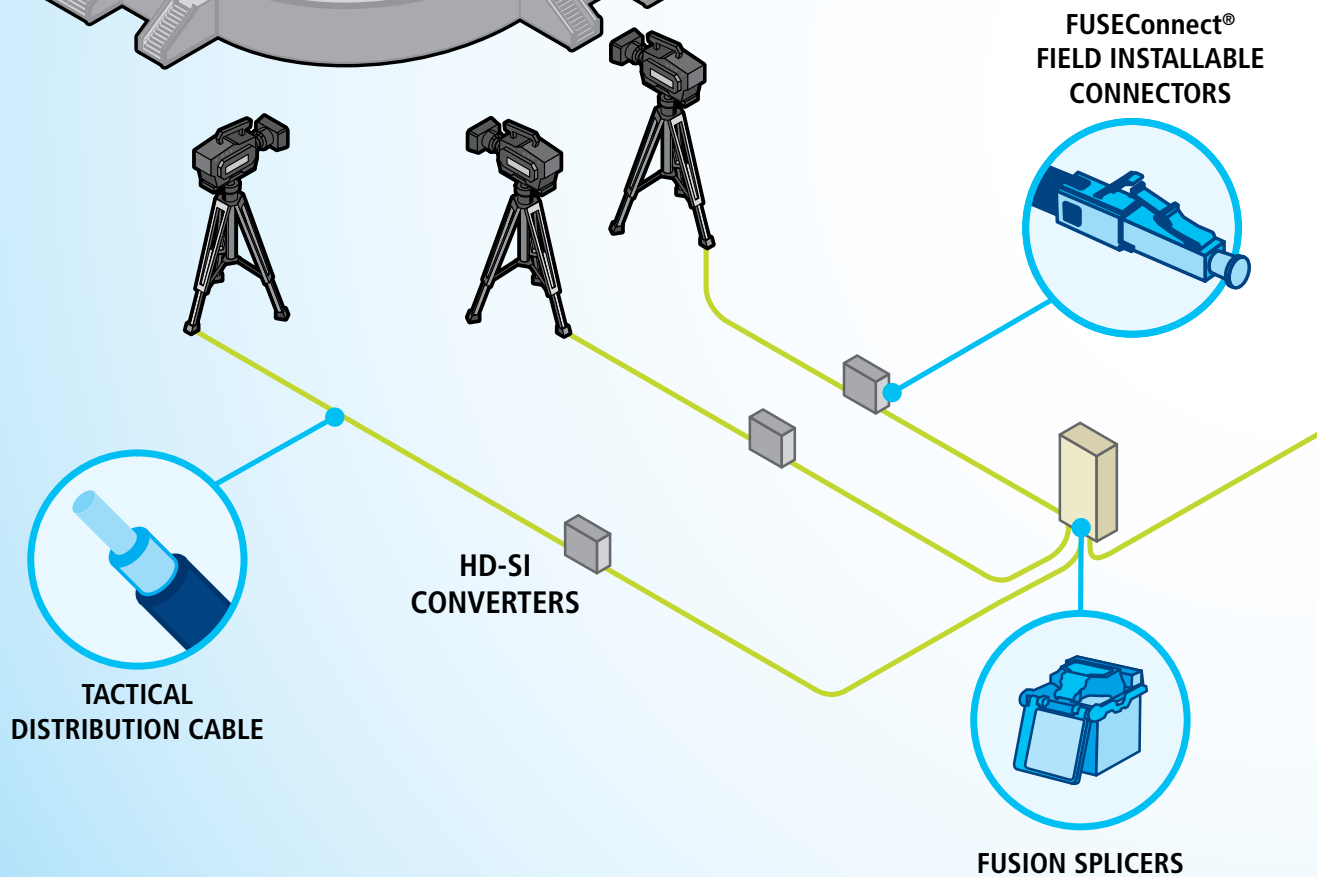
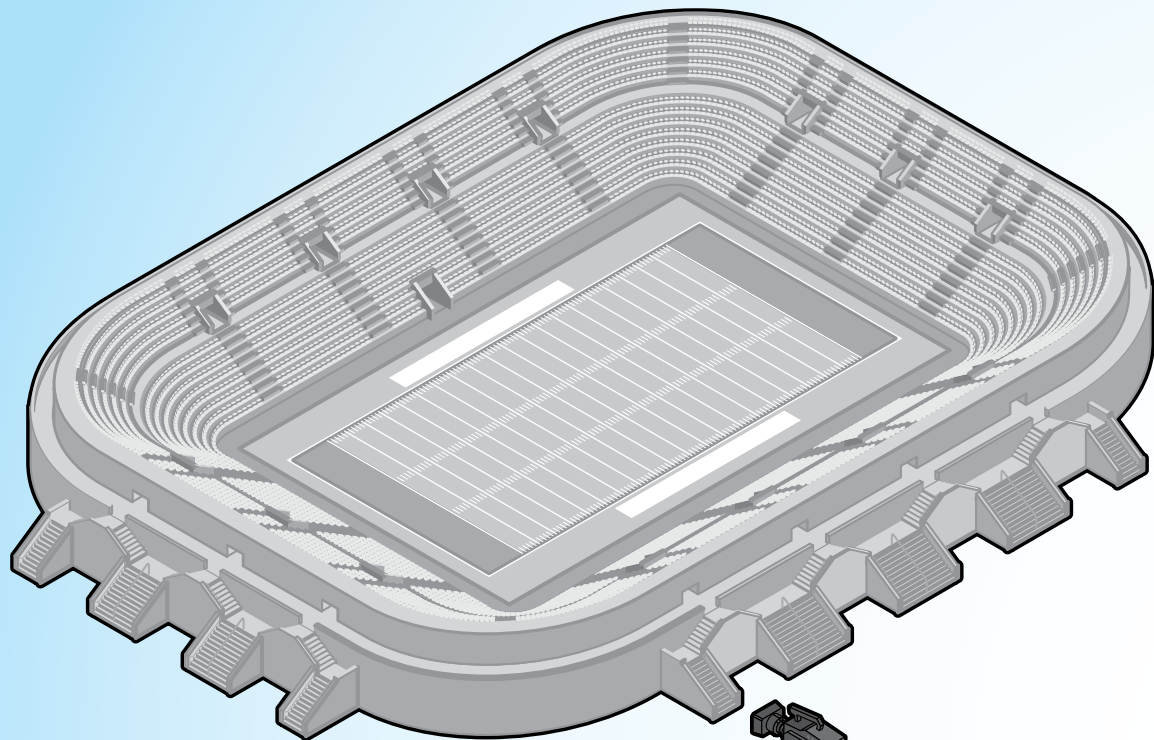




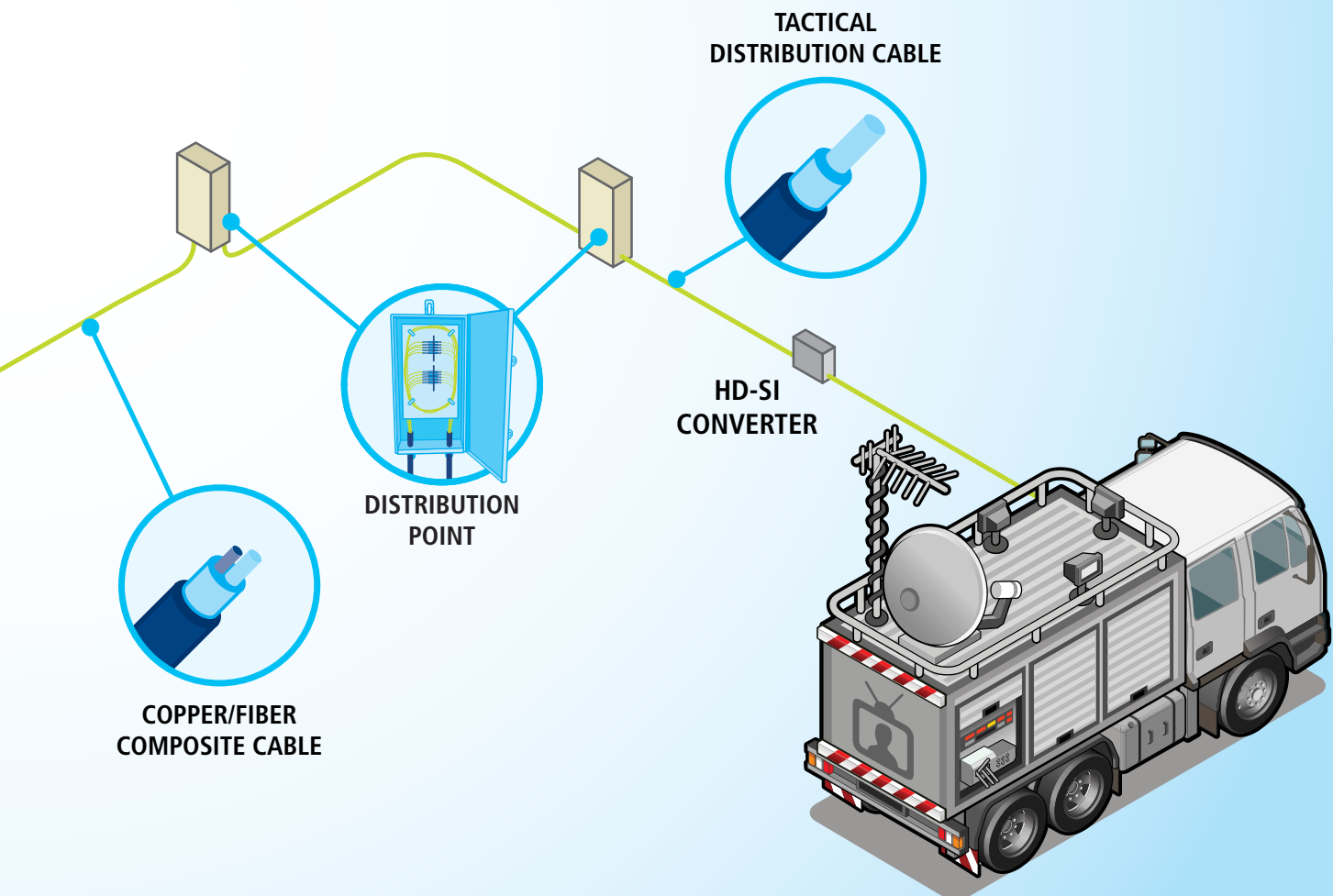
Broadcast Solutions

BROADCAST SOLUTIONS

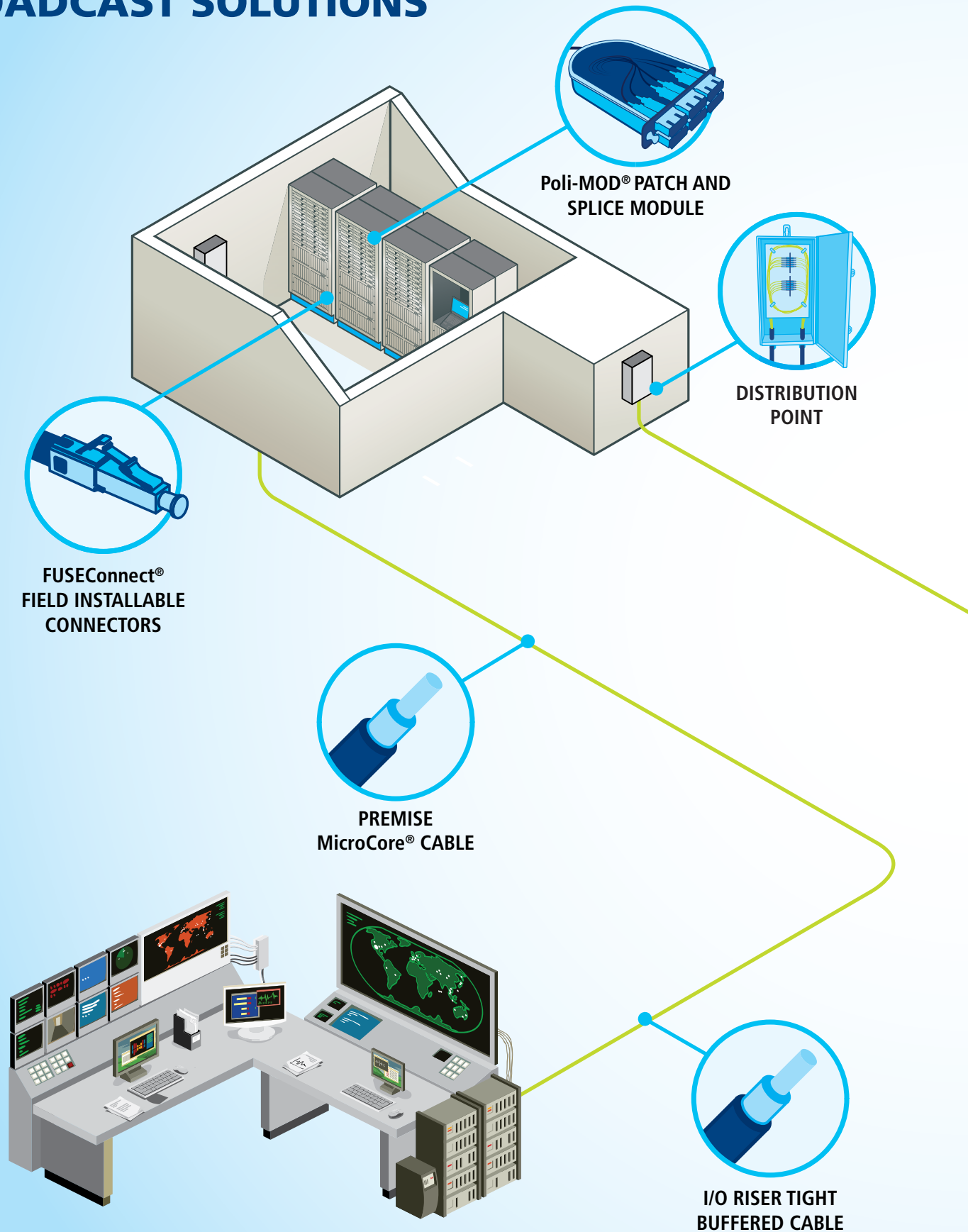


As the demand for high-definition broadcasting signal transmissions has increased and the transition to DTV/HDTV has been fully realized, the role of fiber optics continues to grow, whether live or in the studio. Fiber optic infrastructures offer the advantage of higher bandwidth, optical signal clarity and more reliable real-time transmissions, enabling providers to service even more applications for emerging technologies such as 4K ultra high-definition television (UHDTV), Internet-protocol television (IPTV), and multi-channel audio.

AFL's history as a fiber optic pioneer and our unique broadcast fiber optic cable solutions continue to provide an efficient and reliable way to manage signal transport. Designed to survive the challenges of studio and deployable broadcast applications, AFL's tight-buffered cables are water- and UV-resistant, can be deployed and retrieved as needed, and are resistant to impact, bends and harsh conditions. Available in a range of fiber types, cable configurations, enhanced abrasion resistance options, and low-friction jacket selections, AFL's products are distinctively suited for fiber optic assemblies used in professional and commercial AV applications.



BROADCAST SOLUTIONS





**COPPER/FIBER
COMPOSITE CABLE**

FIBER OPTIC CABLE



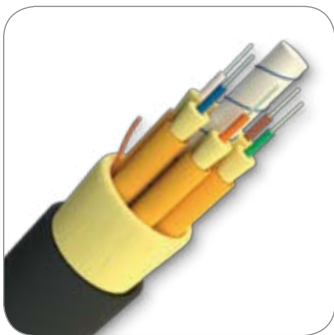
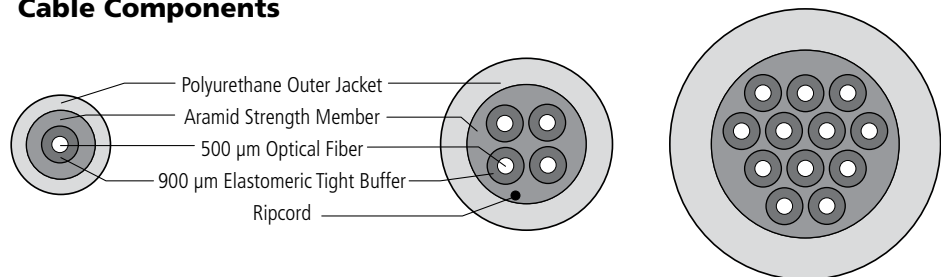
Tactical Tight Buffered Cable

AFL Tactical Tight Buffered Cables are ideal for use in installations where extreme environmental conditions are present. Designed to be deployed and retrieved in the field, these cables are highly resistant to damage caused by repetitive impact or harsh conditions. Available in channel counts up to 24 in Single-mode, Multimode, OM2, OM3 and OM4.

Features

- Cut resistant polyurethane outer jacket
- Highly flexible construction allows for multiple deployments
- All aramid strength members
- Performance in wide temperature range
- High impact and crush resistance
- Durable in high traffic areas
- Water and UV resistant
- Multiple jacket colors available
- MSHA approval pending
- Available with 500 μm enhanced performance fiber or 250 μm optical fiber building blocks

Cable Components



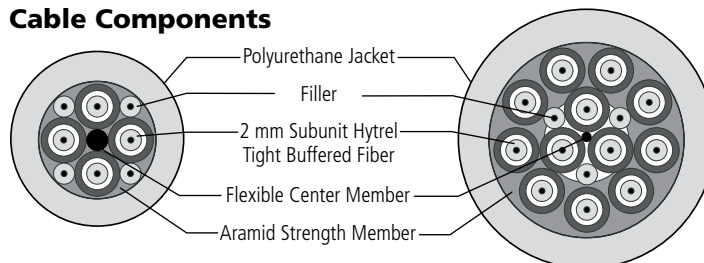
BU Series Tactical Breakout Cable

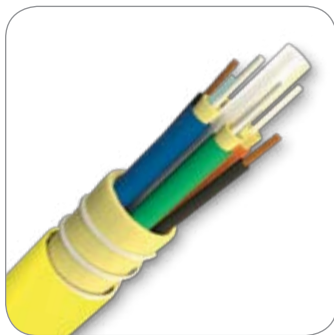
AFL's BU Series Tactical Breakout Cables are ideal for use in harsh environment applications requiring a rugged deployable cable solution. Consisting of 2 mm sub-cables, each optical fiber is suitable for direct termination enabling fast and easy installation. This reduced diameter, light weight, and high strength cable features a tough abrasion resistant polyurethane jacket that offers exceptional performance through a wide range of temperatures. It is also impervious to common chemicals found in industrial environments. Available with a flame retardant jacket option the BU series tactical breakout cable is ideal for use in mines, petrochemical facilities, and other industrial applications.

Features

- Deployable design
- UV, Fungus, and water resistant
- Highly crush and impact resistant
- 2.0 mm sub-cables available in a variety of colors
- Available with shiny or matte low-friction jacket
- Available with bend insensitive SM and MM optical fiber
- Supports all multi-gigabit Ethernet standards
- RoHS compliant

Cable Components





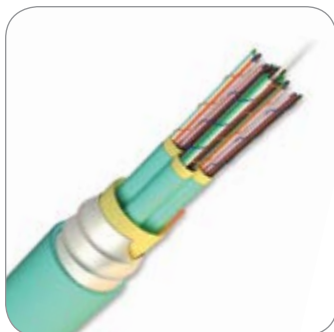
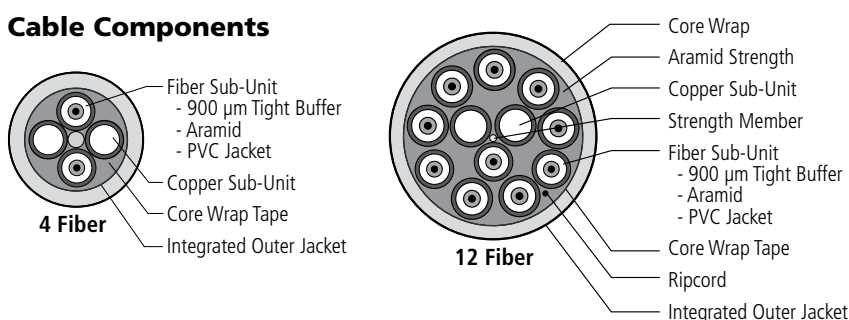
Copper/Fiber Composite Cable

Rugged, easy-to-use composite cable consisting of flexible stranded copper conductors and integrating communications links utilizing fiber optic technologies. The breakout design provides additional protection for both the copper and fiber channels by individually protecting each with insulated jackets and all-dielectric strength members. For applications requiring remote low-voltage power and high-speed communications, these designs provide an efficient single-installation option where space is of a premium and devices are not easily accessed.

Features

- Rugged riser-rated construction
- Water-blocked
- Flexible stranded copper (12 AWG, 14 AWG, 16 AWG, 18 AWG available)
- High-speed fiber optics
- UL 13, UL1666 rated
- NEC 725 classified
- CL2R-OF classified

Cable Components



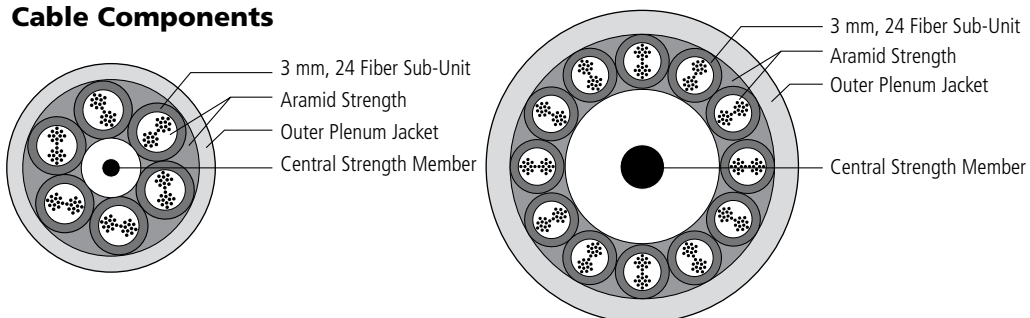
Sub-unitized Premise MicroCore® 3.0 with Spider Web™ Ribbon Technology

Sub-Unitized Premise MicroCore 3.0 fiber optic cable enables the highest pathway density of all AFL inside plant cabling solutions, revolutionizing deployment and allowing the end user to realize savings in space, routing infrastructures and fiber management. Aluminum interlocking armor provides the best balance of ruggedness, flexibility and low weight. Flame-rated armored cables with no outer jacket and flame-rated armored cables with steel interlocking armor are also available.

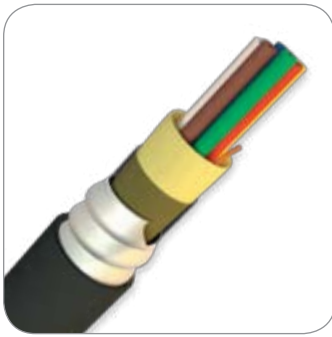
Features

- Plenum NFPA 262 Rated
- Flexible dielectric FRP central strength member
- Aramid tensile strength members within sub-units
- Compliant to Directive 2002/95/EC (RoHS)
- Tested to meet or exceed EIA/TIA 568-B3, Telcordia GR-409-CORE (Issue 2 - Horizontal Backbone Cables) and ANSI/ICEA S-83-596
- CSA 22.2#232 (FT6)

Cable Components



FIBER OPTIC CABLE



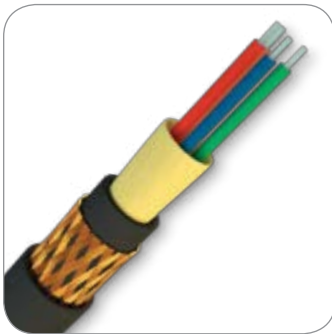
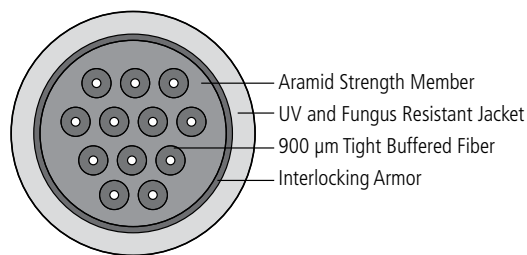
Indoor/Outdoor Riser Tight Buffered Cable

AFL's Indoor/Outdoor Riser Cables are water-blocked CORE and ICEA-S-104-696 cables with fiber counts from two to 24. These cables are OFNR-listed for indoor applications. Both sub-unit jackets and outer sheath contain a UV stabilizer and anti-fungus protection for use in outdoor applications.

Features

- Water-blocked sub-units meet water penetration requirements of GR-20-CORE, ensuring that damage to cable is restricted to a repairable length of several meters
- Moisture-resistant, fungus-resistant and UV-resistant outer jacket suitable for outdoor use
- Riser-rated for use in all environments including general inside plant and outside plant
- Sub-units tested to meet or exceed EIA/TIA 568-A/GR-409-CORE and ICEA-S-104-696
- Compliant to Directive 2002/95/EC (RoHS)
- MSHA-approved for mining applications

Cable Components



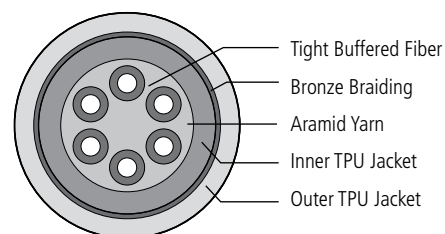
Braided Armored Tactical Tight Buffered Cable

AFL Armored Tactical Tight Buffered Cables are ideal for use in installations where extreme environmental conditions are present. With the addition of a wire braid embedded within the jacketing system, these cables are highly resistant to damage caused by repetitive impact, high flex, crush, and abrasion as well as other harsh conditions. With utilization of AFL's tight buffered fiber technology, field termination is simplified.

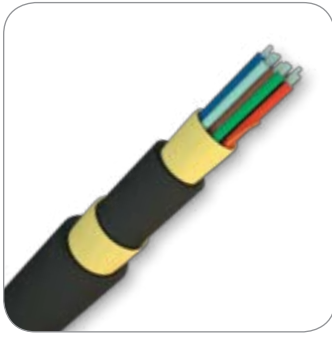
Features

- Cut resistant polyurethane outer jacket
- Highly flexible construction allows for multiple deployments
- Performance in wide temperature range
- High impact and crush resistance
- Durable in high traffic areas
- Water and UV resistant
- Multiple jacket colors available
- Capable of supporting all Multi-Gigabit Ethernet Protocols

Cable Components



CABLE ENHANCEMENTS



Tactical+

In remote or outside broadcast applications, cables are drug through gravel parking lots, around fences, and strung through objects with sharp edges. Abrasion and crush resistance is critical to ensure real-time transmission of HD broadcast signals. AFL's Tactical+ fiber optic cables set a new standard in performance for the broadcast industry. The unique jacket construction of Tactical+ cables can maintain fiber integrity in the toughest broadcast uses while still offering flexibility for deployment and retrieval options. More than any other industry, signal integrity is critical in broadcasting. Tactical+ cables are the cable of choice when signal transmissions simply cannot fail. When tested for abrasion against an industry standard military tactical cable, Tactical+ performed more than five times longer. Testing, according to MIL PRF 85045, was modified by increasing the load from one pound to 5 kilograms. The cables were then cycled to failure. Best in class traditional products were completely shredded in as few as 50 abrasion cycles. AFL's Tactical+ continued to survive for hundreds of cycles.

Additionally, Tactical+ cables feature exceptional crush resistance properties. Military standards, regarded as the most rigorous in the world, call for 2000 N/cm of cable OD for crush resistance specifications. AFL Tactical+ not only meets this requirements but exceeds it by over 2 ½ times, performing at over 5,000 N/cm.



Rodent Deterrent

Cables placed in outside broadcast and other harsh environment applications are designed to endure the extreme challenges associated with temperature fluctuations, crush and impact, tensile loading, and even immersion or burial applications. Yet, surprisingly one of the biggest threats to fiber optic cable signal integrity is rodents chewing on cables to whittle down their incisors hence damaging the fibers within. The result is exposed or broken fiber links causing increased maintenance costs, reduced productivity and possibly lost revenue.

To combat these furry attacks, AFL has developed a new rodent deterrent enhancement option for its tactical and OSP fiber optic cables. These new jacket options significantly reduce cable damage from gnawing rodents. Tests show that the AFL bittering agent used in our new Rodent Deterrent Tactical and OSP cables repel rodents for far longer than cables without it.

While there have been many methods to prevent rodents from chewing on fiber optic cables, by utilizing AFL's new rodent deterrent cable jackets, customers can realize reduced maintenance costs and longer cable life cycles. Overall, these new cable jacket options offer a non-toxic, safe and effective method of controlling damage caused by rodents while still offering the ruggedness expected from AFL's tactical and OSP fiber optic cables.

This enhancement is available for AFL's Tactical, Loose Tube and other Outside Plant cable products.

TEST & INSPECTION



M310 Enterprise OTDR

Rugged, lightweight and easy to hold, the M310 has a Touch and Test user interface that makes it easy for experts and novices to test and document fiber networks accurately and quickly. With dynamic range up to 38 dB, and 16 hour battery run time, M310 provides complete Tier 1 insertion loss and Tier 2 OTDR testing. Using pre-set Industry ISO/TIA standards or user set Pass/Fail thresholds, technicians are alerted to installation problems and failures in easy-to-interpret event table. Pass/Fail event table and trace are displayed on the same screen for easy correlation.

Features

- Industry leading TruEvent™ analysis
- Short dead zones provide precise testing of closely spaced events
- Front Panel and First Connector Check
- Live fiber detection
- Inspection capable with DFS1 Digital FiberScope
- Integrated Source, Power Meter and VFL
- Multiple languages supported

OPTICAL CONNECTIVITY



Poli-MOD® Patch and Splice Module

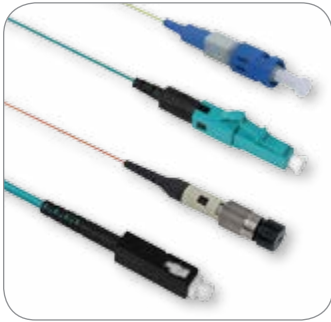
AFL's new Poli-MOD is an innovative patch and splice module, which offers an inventive and effective means to accommodate up to 24 fiber interconnections in an industry-standard, single-slot LGX®118 footprint. The new Poli-MOD offers a unique and robust way to secure cable without the need for time-wasting, tie-wrap alternatives. Additionally, the module leverages a creative snap-in splice sleeve cradle to securely manage both single and ribbon fiber arrangements. These features provide the capacity to outfit a standard 4RU rack-mount panel with up to 288-fiber interconnections.

The Poli-MOD is also offered in an arrangement that supports the low loss budget requirements of Distributed Antenna System (DAS) networks. This is accomplished through the elimination of an interconnection point while providing a robust splicing environment for rack and wall-mount panel applications.

Features

- 24-fiber interconnection capacity
- LGX 118 compatibility (single-slot module)
- Effective and time-saving cable mounting mechanism (no tie-wraps necessary)
- Inventive splice sleeve cradle
- Available in SC, LC, ST and FC connector arrangements
- Organized fiber routing
- Fixed solution, no moving parts
- Multi-directional cable entry access
- DIN rail mountable (with DIN Mount Kit)

OPTICAL CONNECTIVITY



FUSEConnect® Fusion-Spliced, Field-Installable Connectors

FUSEConnect fusion-spliced, field-installable connectors are uniquely designed and feature only four-to-five components. The factory pre-polished ferrule eliminates the need for polishing, adhesives and crimping in the field, which minimizes the potential for operator error and expensive connector scrap.

FUSEConnect utilizes a fusion splicer to terminate the connector in the field, addressing return loss concerns present in analog optical networks. This advanced process yields true APC performance for SC/APC and LC/APC configurations, and is compliant to GR-326-CORE. FUSEConnect is compatible with Fujikura fusion splicers and most other fiber-holder-based fusion splicing platforms.

Features

- Field installable
- No adhesives, crimping or polishing
- True APC performance
- MM compliant to TIA/EIA-568C.3
- Compatible with most fusion splicers



LightLink 580 Optical Splicing and Distribution Enclosure

The LightLink (LL) 580 Optical Splicing and Distribution Enclosure provides for organizing, splicing and interconnecting fibers in broadband, distribution and building entrance applications. The splice tray panel is equipped with LGX® 118 footprint snaps so various types of connectors may be installed. The enclosure features a scratch resistant powder coated base and a fully gasketed hinged cover. The cover was designed so that it may be installed on either side of the enclosure where there are space restrictions. The internal interconnect tray and back-plate may be removed from the enclosure and brought to a splicing table to complete splicing, fiber routing and fiber management. The cable entry base has four interchangeable configurations to allow the installation of cable through a grommet system, or through pre-installed conduit couplings.

Features

Enclosure:

- Tested to meet to Telcordia® GR-2898
- NEMA 3 rated
- Independent cable strain-relief for flat drop cable and 2 mm / 3 mm drops
- Unique self-sealing grommet system
- Self-contained inner chassis frame with separate outer housing
- Dual telco can-wrench locking fasteners
- Hinged cover securable with standard padlock
- Internal, owner-accessible security screw
- Available with a variety of connector types and cable entrance choices

Interconnect Splice Tray Kit:

- Included: (2) Factory Pre-installed LL-7644 Universal Splice Tray with SC-UPC 900 µm pigtails for up to 72 connections. LC-UPC Duplex adapters may be installed for up to 144 LC connections with mass fusion.
- Interconnect Tray may be purchased with either SCUPC adapters and pigtails preinstalled or LC-UPC Duplex adapters and pigtails pre-installed.



F AFL

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