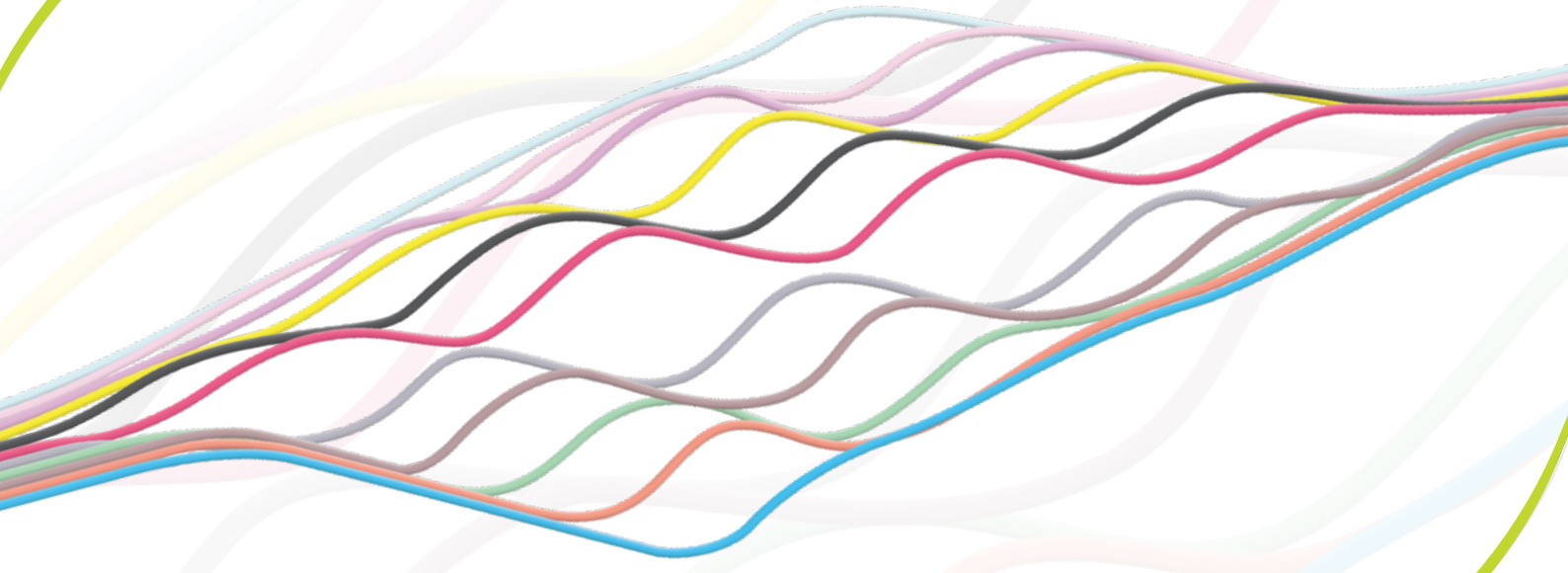
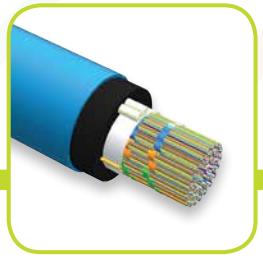
Wrapping Tube Cables with SpiderWeb Ribbon®





We connect™

Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®)

AFL's Wrapping Tube Cable (WTC) with SpiderWeb Ribbon® (SWR®) is a true game changer. The unique construction of ribbon fibre makes it easier to work with compared to loose tube or ribbon fibre cables, saving installation and splicing time. SWR is easily grouped together allowing more fibres to be used in a smaller space. With AFL's WTC, you can now run 1,728-ribbon fibre cables in a standard telecommunications sub-duct.

About Wrapping Tube Cable (WTC)

Wrapping Tube Cable (WTC), with SpiderWeb Ribbon® (SWR®), is an ultra-high density outside plant cable designed specifically for access and distribution markets. It is compliant with the latest issue of the outside plant cable standard, Telcordia GR-20. With an ultra-high density and a new ribbon technology called SpiderWeb Ribbon®, WTC provides one of the smallest cable diameter, lowest weight, and highest fibre-count optical cables in the industry. WTC with SWR® cables are available in fibre counts from 144 to 3,456, and AFL are constantly working to increase fibre count and density.

About SpiderWeb Ribbon® (SWR®)

SWR® is a bonded fibre ribbon design allowing for either a highly efficient ribbon splicing or an individual fibre breakout splicing process. This flexibility allows for a single cable design to cover a diverse set of applications from access networks to high-fibre count mass fusion splicing in core networks. With the ability to roll and conform, the SWR® provides for ultra-high density packaging in the WTC, producing one of the world's most dense optical fibre cables.

Access Ready Construction

With an Access Ready Construction (ARC), AFL's WTC is completely gel-free making it easy to access and identify optical fibre circuits. This dry water-blocking technology reduces the time required to prepare cable end-span and mid-span access, resulting in labour savings. WTC also eliminates jelly-filled tubes, instead utilising a dual-binder system to keep fibres organised yet providing immediate access to fibres when needed.

Flexible Single or Mass Splicing

The SWR® technology is mass fusion spliced or single fibre spliced without the need to ribbonise or de-ribbonise the fibre. This allows the flexibility of single fibre splicing or the simplicity of mass fibre splicing – it's your choice.

Access Ready Construction

AFL's WTC provides an Access Ready Construction (ARC), enabling rapid cable preparation and termination, reducing labour costs.

Completely Gel-free Construction

This fully dry water-blocked construction simplifies fibre access, allowing for end-span or mid-span access without the need to use water or other chemicals to clean gel or jelly substances. Unlike semi-dry construction cables, ARC eliminates the gel cleaning step entirely.

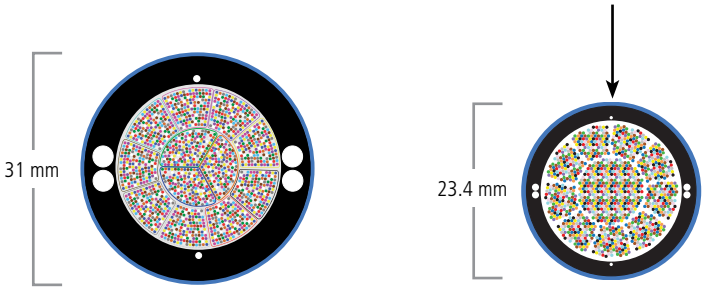
Dual Binder System

AFL's WTC utilises a bundling system. Groups of band-marked ribbons are bundled together, utilising an innovative dual binder system. This binder system holds the fibres securely, preventing them from becoming tangled or mixed with other bundles. When it's time to prepare a bundle, it simply pulls open with no tubes to strip.

SWR® Break Out Kit's

AFL's Break Out Kit's for SWR® provide the management needed to terminate such large fibre count cables. The multi-stage breakouts ensure the effective management of fibres from the outer cable jacket all the way to the splice cassette.

Wrapping Tube Cable (WTC) with SWR® Actual Size



WTC 3456 Fibre
Construction

WTC 1728 Fibre
Construction

Splicing

SWR® allows the flexibility to splice as single or ribbon, depending on the requirements and customer preferences. The two techniques can even be combined within the one cable, with some fibres single-fibre spliced and some mass-fusion spliced.

Single-fibre Splicing

When spliced as single fibres, SWR® allows customers to achieve the ultimate in low loss through the use of core-align fusion splicing. Cleaved with a precision optical fibre cleaver, such as the Fujikura CT-30, the fibres are simply spliced one-by-one with a core alignment splicer, such as the Fujikura 70S+. Splicing as single-fibre allows customers to:

- Achieve the lowest possible overall splice loss
- Route single fibres to completely separate trays for splicing
- Splice without the need to de-ribbonise the fibres
- Follow well established industry practices for single fibre terminations

Mass (Ribbon) Fusion Splicing

When spliced as ribbon fibres, SWR® allows customers to improve overall splice time through the use of mass-fusion splicing. Fibres can even be spliced directly to an AFL MPO FuseConnect. Utilising the same CT-30 precision cleaver, the fibres are spliced 12 at once in a mass-fusion splicer, such as the Fujikura 70R+. The performance of the AFL SWR® fibres combined with the Fujikura 70R+ fusion splicer allow for consistently low splice losses, particularly when combined with AFL SWR® pigtails. Splicing as ribbon fibre allows customers to:

- Decrease the time taken to perform splicing
- Bulk splice all fibres for butt-type joints
- Splice without the need to ribbonise the fibres
- Follow industry standard practices for ribbon fibre splicing.

Enclosures

AFL's WTC enables customers to reduce the size of splice enclosures due to the innovative compact SWR® bundles. This minimises the space required to house enclosures in both racks and manholes.

Underground Dome Enclosures

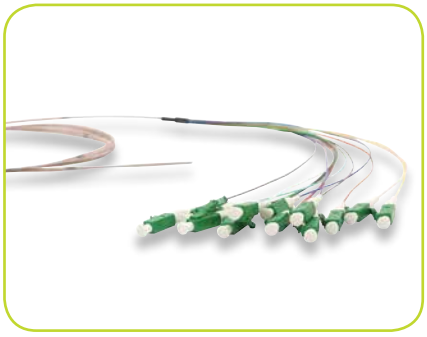
AFL's range of FSCO underground dome enclosures are designed to simplify splice management. The high quality enclosure is engineered to reduce the complexity associated with fibre splicing in the field, thus reducing installation time and training. These durable, easy to install enclosures provide the ability to splice up to 3,456 optical fibres. Suitable for a variety of applications including long haul cable jointing, cable repairs and branching, the FSCO range of enclosures is specifically designed for WTC and SWR® and include tubing and accessories required in the field.

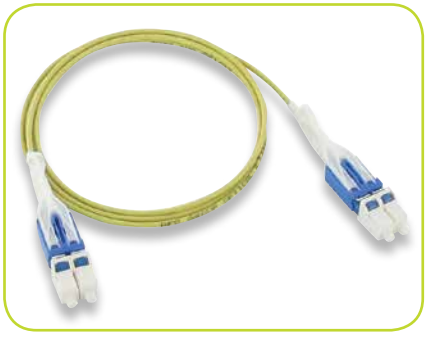
Rack Enclosures

AFL has a comprehensive range of rack mounted sliding enclosures available in 1RU, 2RU and 3RU. All AFL sliding enclosures use high quality, double-extension rails to increase internal accessibility during termination or when maintenance is required. These enclosures allow for the termination of SWR® into a variety of connectors through either single or mass-fusion splicing.

Infinity Fibre Distribution Frame

The infinity Fibre Distribution Frame (IFDF) is a high density optical interconnect suited to a range of communications environments. Modular in design, the IFDF is particularly suited to high fibre count WTC and SWR® applications. Based on a module capacity of 24 fibres, the IFDF can present 3,120 spliced SWR® terminations, making it ideal for the termination and management of high fibre count WTC cables, and the associated cross-connection.





Connectivity

AFL manufactures a comprehensive range of high quality connectivity components that are ideally matched to SWR®. Manufactured globally by AFL, they can be supplied with a vast variety of connector types and cable types, producing virtually any combination.

SWR® Optical Fibre Pigtails

AFL's SWR® Optical Fibre Pigtails provide the ultimate in splicing compatibility. With glass compliant to both ITU-T G.652.D and ITU-T G.657.A, compatibility with SWR® is ensured. The SWR® design increases the ability to route the ribbon through fibre management devices, such as splice cassettes or trays, where ordinary ribbon fails. Featuring high-quality, machine-polished connectors for consistent low loss performance and interferometer tested for geometry compliance, AFL pigtails offer low loss repeatability and intermateability.

Tight Buffered Optical Fibre Pigtails

For single fibre splicing, AFL manufacture a full range of tight buffered optical fibre pigtails. With high-quality elastomeric buffer coatings, AFL pigtails are easy to strip and prepare. Our traceable, standards-based testing procedures ensure consistently high quality product. Compliant to ITU-T G.652.D, the optical fibre used in AFL's tight buffered pigtails is compatible with SWR® for single fibre splicing.

Optical Fibre Patchcords

AFL manufactures and stocks a broad range of factory terminated and tested optical patch leads and assemblies. With a global manufacturing capability, AFL's ability to deliver high-quality leads in high volumes is second to none. Our national branch network and large stock holding ensures a prompt ex-stock turnaround. For custom manufactured assemblies, our Melbourne based facility provides rapid manufacture and delivery.

Testing & Inspection

AFL's test and inspection products consistently meet and exceed customer needs. We deliver exceptional fibre optic testing equipment and outstanding service. Our ISO 9001:2008 certification and quality practices ensure you receive excellent products and documentation.

AFL products are designed to provide accurate results every time. They are engineered to endure outside plant environments, and feature intuitive user interfaces that provide quick results without complicated training requirements. Product lines include optical time domain reflectometers (OTDRs), loss testing kits, inspection and cleaning, fibre identifiers, fault locators and more.

FlexScan OTDR

With SmartAuto™ OTDR data acquisition, robust event analysis and LinkMap® display, AFL's FlexScan® OTDRs enable even novice technicians to quickly and reliably troubleshoot or completely characterize optical networks. Offering integrated source, power meter, VFL and wireless communications, pocket-sized FlexScan's set a new standard for price, performance, portability and ease-of-use.

FOCIS Flex Fibre Optic Connector Inspection System

Connector inspection is simple, fast, and convenient using AFL's FOCIS Flex. With one button, FOCIS Flex auto-focuses, captures, centers and displays the end-face image. It also applies pass/fail rules, auto-saves and can Bluetooth transfer the image and results to a paired Android or iOS smart device, FlexScan or FlexTester OTDR.

Cleaning

AFL offers a complete selection of compact fibre optic cleaning kits for field cleaning of connector end-faces and splicer v-grooves. We offer pre-stocked kits with a variety of cleaning tools and can also build you custom kits to meet your specific application needs.

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