

# Locking Keyed Behind the Wall (BTW) 900um Duplex LC Connectors

**Advanced Fiber Products Ltd. (AFP)** is a leading designer, developer and manufacturer of optical and optoelectronic products for telecom, enterprise, oil and gas, video broadcast and military markets. AFP offers a wide range of novel components, custom optical sub-assemblies and also complete media conversion and data transmission solutions. It provides competitive products and excellent service all over the world. AFP's facilities are located at Haverhill, near Cambridge in the United Kingdom and in Chicago, USA.

**AFP's unique Secure LC connectors** are designed to prevent unauthorized and inadvertent changes in highly sensitive applications such as Datacenters and Secure IT networks where multiple physical layer classifications may exist. (Secure LC Patent's pending).

The BTW Secure LC connectors used for 900um secondary coated fibers are designed to plug to any industry compliant LC adaptors or active device ports and cannot be disconnected without a special extraction tool. Eight different key configurations are available as standard options. The connectors can be purchased as pre-terminated 3m pigtails for field splicing or supplied as components for direct field terminated using conventional 'pot and polish' techniques. They are used to lock and 'secure' the LC connection on the inside of equipment or user access points.

The extraction tools allow for easy manual connector removal even from very high density patch panels and are color coded to match the connector key type. The connectors plug to both duplex and quad adaptors.

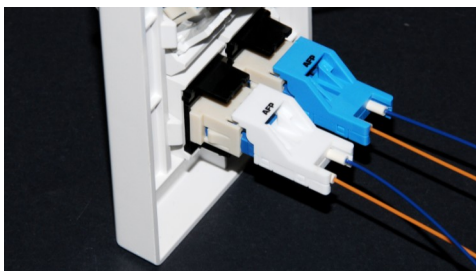
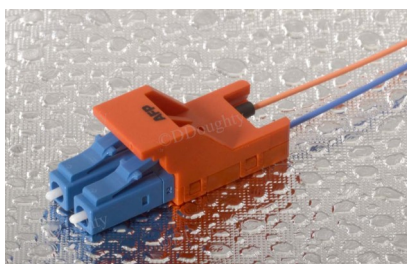
An additional product novelty is the custom dust cap required to remove a connector from an extraction tool and hence promoting good 'fiber' discipline.

## Applications

- To secure the connectivity of 900um pigtails to the 'inside' of enclosures
- Military IT Networks
- Secure Federal IT Networks
- Commercial Data Centers
- Private Networks
- Industrial Process Control
- Fiber Sensor Applications

## Features

- Secure LC locks into ports once plugged — keyed extraction tool required for removal
- 8 key combinations with separate colors and an administrator key option.
- Compact design for wall-boxes, floor boxes and the inside panel of equipment racks
- Designed for field splicing of pigtails or traditional direct field termination on-site
- Dust cap "discipline" feature



**Secure LC Patent Application No.0903326.7**

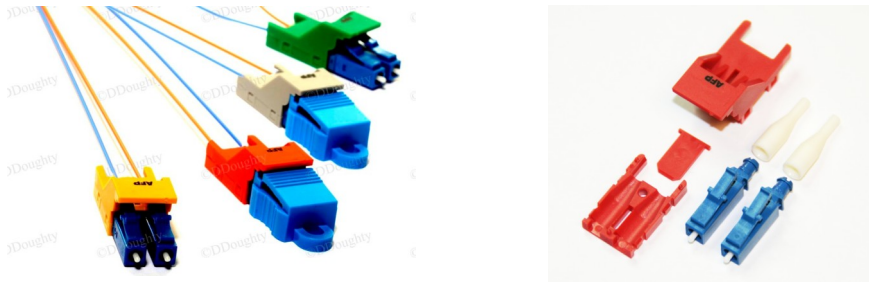
Advanced Fiber Products Ltd.  
Holland Centre  
Holland Road Industrial Estate  
Haverhill  
Suffolk  
England CB9 8PR

Phone: +44 (0) 1440-706441  
Phone: USA: +1 847 768 9001  
Fax UK: +44 (0) 1440-762044  
USA: +1 847 768 9002  
E-mail: sales@afpgco.com

**A**Advanced  
**F**Fiber  
**P**Products

# Locking Keyed Behind the Wall (BTW) 900µm Duplex LC Connectors

Advanced Fiber  
Products Ltd.



Connector Property	Singlemode	Multimode
Insertion Loss	0.10dB typical	0.20dB typical
Return Loss	≥ 55dB typical for UPC	-
Durability	< 0.2dB change 500 cycles	< 0.2dB change 500 cycles
Operating Temperature	-40°C to +70°C	-40°C to +70°C
Ferrule Criteria	125.5µm +1/-0 Concentricity: ≤ 1µm	127µm nominal
Connector Part Number	CON20119-1X-0YS	CON20119-1X-0YM

Contact AFP for price and part numbers for Pre-terminated Duplex SLC Splicing Pigtails



Key/Housing Color	Connector dash No. XX	Extraction Tool No.	Locking Port Plug
Black	-12-	T0010121-12	PLG10271-12
Red	-13-	T0010121-13	PLG10271-13
Green	-14-	T0010121-14	PLG10271-14
Blue	-15-	T0010121-15	PLG10271-15
Grey	-16-	T0010121-16	PLG10271-16
White	-17-	T0010121-17	PLG10271-17
Orange	-18-	T0010121-18	PLG10271-18
Yellow	-19-	T0010121-19	PLG10271-19
Purple	Administrator Tool	T0010121- 11	-

Advanced Fiber Products  
Holland Centre  
Holland Road Industrial Estate  
Haverhill  
Suffolk  
England CB9 8PR

Phone: +44 (0) 1440-706441  
Phone: USA: +1 847 768 9001  
Fax UK: +44 (0) 1440-762044  
USA: +1 847 768 9002  
E-mail: sales@afpgco.com

Y in connector part code designates boot color. Aqua=1, Black=2, Green=4, Blue= 5, White=7, Beige=8.

X in connector part code designates body key/color. 2=Black, 3=Red, 4=Green, 5=Blue, 6=Grey, 7=White, 8=Orange, 9=Yellow

Replacement Connector Dust Cap - Part number CAP10122-01

RoHS Directive Compliant .Conforms to GR-326. Flammability: UL 94 V-0 Grade

www.afpgco.com

Advanced  
Fiber  
Products

Advanced Fiber Products reserves the right to change or discontinue any product or service in this publication and advises customers to obtain the latest versions of publications before placing orders. Patents are pending. Advanced Fiber Products standard warranty conditions apply and are available upon request. Advanced Fiber Products customers using its products in life preserving applications where the reasonable malfunction of the products might be expected and may result in personal injury, agree to indemnify Advanced Fiber Products against all such improper use and any consequential damages. Advanced Fiber Products makes no representations or warranties that the products are free from patent, copyright or intellectual property rights. Standard Terms and Conditions of sale apply and are available on request