

Amphenol Charles Fiber Aerial Solutions

CFAS

General Description and Installation

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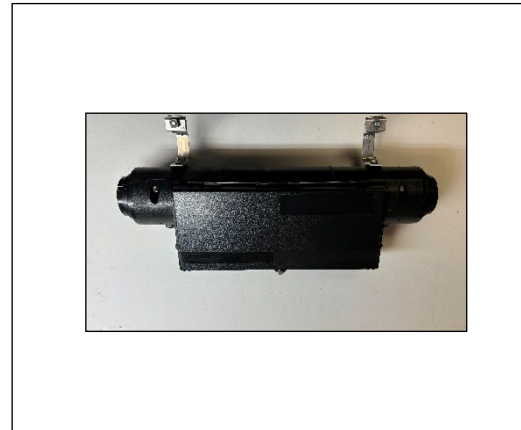


Figure 1 CFAS

1. GENERAL INTRODUCTION

1.1. Document Purpose

This document provides installation instructions for the Amphenol Charles Industries Fiber Aerial Solution. The unit is shown in Figure 1.

-NOTE-
Hereafter the Fiber Aerial Solution will be referred to as the “CFAS.”

1.2. Product Purpose

The CFAS is an inline free-breathing aerial fiber optic splice/drop closure.

1.3. Product Mounting and Location

The CFAS is mounted on an aerial strand in FTTH networks. The unit comes with a pair of aerial strand brackets attached.

2. PRODUCT DESCRIPTION

The CFAS is designed with two sections. The Splice section is for splicing in the feeder cables, and the Drop section is for attaching drop cables. Each section has a separate door to provide protection and separate the trades.

The CFAS dimensions are shown in Figure 2. Components are shown in Figure 3.

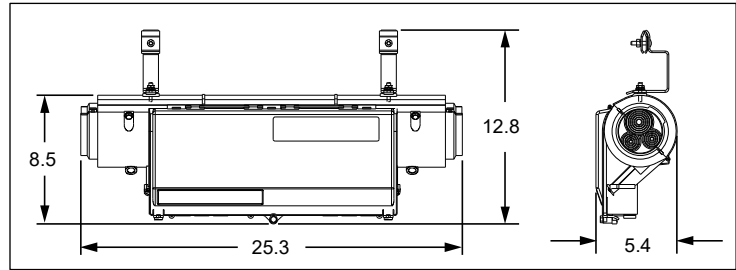


Figure 2 CFAS Dimensions in inches

3. SAFETY PRECAUTIONS



— WARNING —

Risk of serious eye damage! Never look into the end of a fiber optic line or use a magnifier in the presence of laser light or radiation. Exercise caution when installing, testing or maintaining live circuits. If eyes are exposed to laser light or radiation occurs, immediately seek treatment by a medical professional.



— WARNING —

Cable and fiber cleaning solvents may contain hazardous or harmful materials. Maintain good housekeeping practices and refer to the SDS when working with cleaning solvents or similar products.

Shards and cleaved glass fibers are very sharp and can easily pierce the skin. Use tweezers to pick up cut glass fibers and place them in a specifically designated container. Do not consume any food products near the cable installation site.

Corrugated metal or armor in feed cables is very sharp when cut or exposed. Exercise extreme caution to prevent personal injury. Use protective work gloves when handling armored cable.



— CAUTION —

Perform all bonding and grounding prior to making any electrical and communications connections.

Be careful not to damage any buried cables or service wires while digging either to expose cables or to prepare a hole or trench, or while driving stakes. Buffer tubes and fibers are sensitive to excessive bending, pulling, and crushing forces. To avoid kinking of buffer tubes and fiber damage or breakage, exercise great care when working with fiber, and do not exceed or violate minimum bend radius requirements for fibers, buffer tubes, and cables.

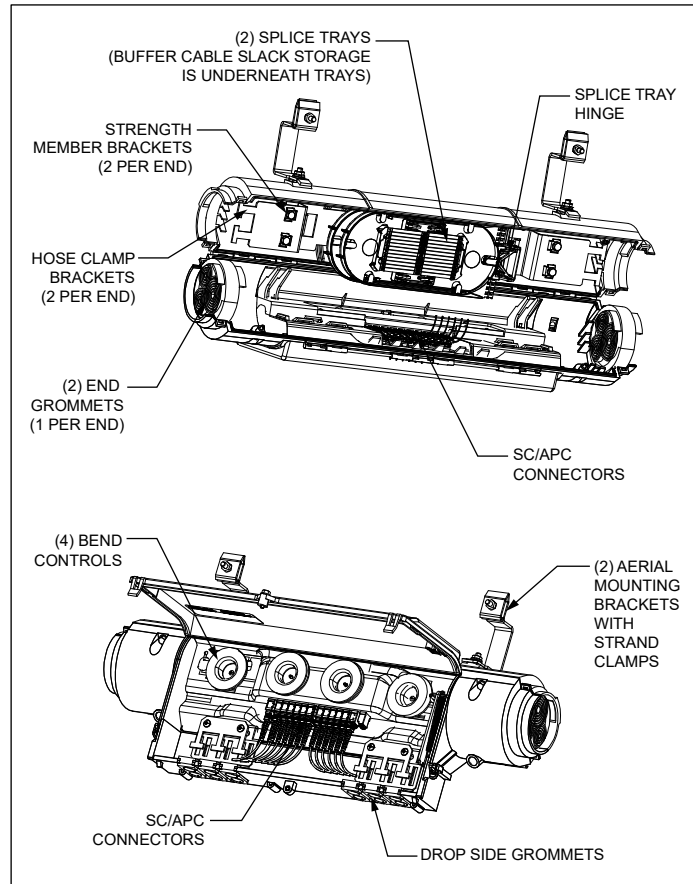


Figure 3 CFAS Components

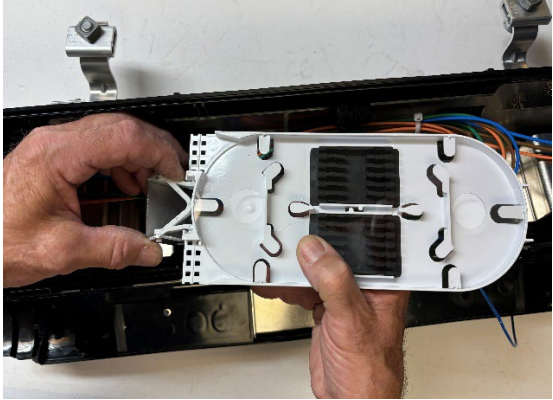
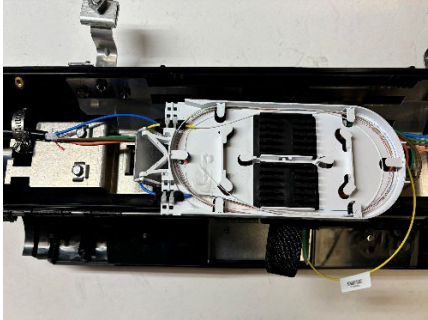


4. INSTALLATION

Gather the following equipment to perform the CFAS installation.

- Can wrench (216 tool)
- Cable marking tool
- Assorted cable ties
- Buffer tube stripper tool (score/cut buffer tubes)
- Fiber splicing tools and equipment
- Safety glasses and work gloves

4.1. Splice Side

Step #	Instruction	
2	Use a can wrench to open the splice side door.	
3	<p>Unsheathe the incoming cable (3 feet from each end if doing a mid-sheath, in-line splice, 7 feet if doing a butt splice). Use max. 72-fiber cable (or 6 buffer tubes).</p> <p>Route the cable into the splice side from both ends. Hose clamp brackets and strength member clamps are provided at both openings. Make sure the hose clamp is secured over the cable sheath, not the exposed buffer tubes.</p>	
4	<p>Route buffer tubes in the slack storage area underneath the splice trays. Groom the buffer tubes using cable ties.</p> <p>Recommended: remove the splice trays to access this area.</p>	
5	<p>Connect the SC/APC connectors to the adapters on the splice side.</p> <p>If using splitters or optical taps, run pigtails or drop legs through the unit and plug the adapters into the bulkhead.</p>	

<p>6</p>	<p>Return the splice trays to the hinge by squeezing the tabs on the tray to fit into the slots on the hinge.</p>	
<p>7</p>	<p>Route the appropriate buffer tube into the splice tray. Strip the buffer tube between the entry and exit points on the tray and route the loose fibers around the inside of the tray. Perform splicing operations in the tray.</p>	
<p>8</p>	<p>Remove the end grommet from the same end that the cable enters the CFAS. Open the grommet.</p>	
<p>9</p>	<p>There are numerous options for cutting the grommet to match the cable that is entering the CFAS. Choose the location and size circle in the grommet that best matches the cable and use snips to cut this circle out of the grommet.</p>	

10	Place the grommet around the cable as it enters the CFAS. Push the grommet into position at the end of the CFAS housing.	
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4.2. Drop Side

Step #	Instruction	
1	Remove a dip side grommet and use snips to cut an opening in the grommet.	
2	Replace the drop cable grommet in the CFAS. Route the connectorized drop cable into the CGAS through the grommet. Route the cable around the bend controls to avoid kinking and over-bending and connect the cable to the SC/APC adapter on the drop side that corresponds to the adapter used on the splice side.	

4.3. Mounting the CFAS

Attach the CFAS to an aerial strand with the included brackets.



Figure 4 CFAS on Aerial Strand

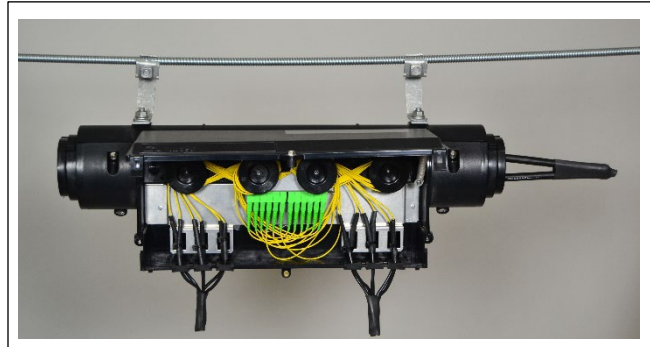


Figure 5 CFAS on Aerial Strand, with Fiber Installation

5. TECHNICAL ASSISTANCE AND REPAIR SERVICE

For questions on product repair or if technical assistance is required, contact Charles Technical Support.

847-806-8500

techserv@charlesindustries.com (email)

<http://www.charlesindustries.com/techserv.htm>

6. PART NUMBER INFORMATION

Model	Description
CFAS-C12SA001	Fiber aerial splice closure drop configuration, 12 SC/APC adapters, two feed 4"x9" 24 fiber splice trays, includes aerial mounting brackets
CFAS-SPL01	Fiber aerial splice closure splice configuration, no adapter panel, one 4"x6" drop splice 24 fiber splice tray, includes aerial mounting brackets
97-FIBR24HTRAY	4"x9" Charles 24-fiber hinged splice tray, with dust cover, identification label and 6 cable ties
97-SMHTRAY	4"x6" Charles 24-fiber hinged splice tray, with dust cover, identification label and 6 cable ties
PS-SABFM03-2AA	Fiber pigtailed, single-mode bend-insensitive fiber, simplex, 2mm yellow jacket, 3 meters, kit of 10

Table 1 Part Numbers