



## Apex® X-2 Sealed Splice Closure

The Apex X-2 is a sealed splice closure designed for protecting optical fiber splices in both above- or below-grade applications in a butt configuration. The Apex X-2 is capable of up to 432 single fusion, 864 mass fusion with standard ribbon, or 3456 (200 μm, 1728 max for 250 μm) mass fusion with “rollable ribbon” fiber types such as AFL’s SpiderWeb Ribbon® (SWR®). Cables are sealed by a unique wedge system spaced evenly around the circumference of the closure’s base. Each cable seal is opened by a press-to-release lever and sealing is completed by actuating a single screw for each cable. Each cable is sealed individually, ensuring original craftsmanship when cables may be added at a later date. Up to 6 splice trays are attached and hinge off a central organizer. A plastic slack storage basket resides underneath the trays with ample tie down points for managing tube and fiber slack.

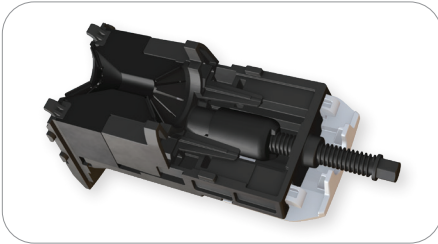
### Features

- Individual cable sealing ports with tool-less release mechanism and gel sealing
- Hinging, lockable splice trays
- Plastic slack storage basket with optional segmented basket to separate ribbon and loose tube slack storage
- Six cable ports with up to six ground lugs
- Capable of up to 16 drop cables with an expressed distribution cable using multi-drop entry kits
- Splice trays with universal splice modules capable of holding single fusion, mass fusion and mechanical splices as well as other devices such as passive optical splitters
- Dome-to-base O-ring seal retained into dome to prevent loss or damage, but is still replaceable if necessary

### Specifications

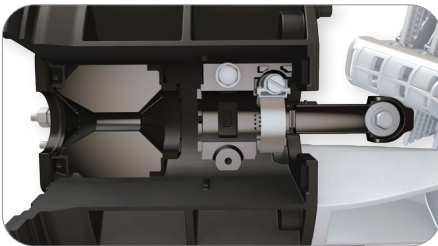
| PARAMETER   | VALUE                                    |
|---|--|
| Dimensions – L x D, in (cm)                           | 25.0 x 12.0 (64 x 30)                    |
| Weight, No Trays – lb (kg)                            | 25 (11.3)                                |
| Splice Capacity – Single, Mass (SWR), Mass (Standard) | 432, 3456, 864                           |
| Splice Tray Capacity                                  | 6  |
| Cable Diameter, Single Port, in (mm)                  | 0.40" – 1.10" (10.0 – 28.0)              |
| Cable Diameter, Multi-Drop Kit, in (mm)               | 0.20" – 0.39" (5.0 – 9.9) or flat drop   |
| Application   | Direct Bury, Handhole, Aerial, Pole/Wall |

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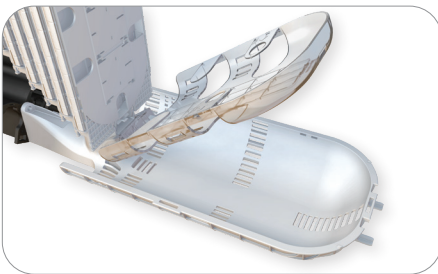
### Gel Sealing

Individual wedges located evenly around the circumference of the base are removed with the press of a button. When cables are in place and ready to be sealed, the gel is compressed by a single screw, decreasing installation time. Individual port seals ensure cables never become unsealed when adding new cables at a later date.



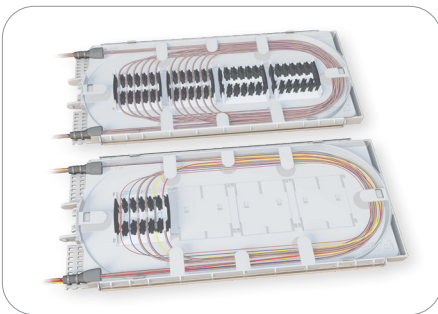
### Cable Entry Ports and Strain Relief

The cable entry ports surrounding the circumference of the base accept single cables from 0.4" to 1.1" in diameter. These ports can be expanded through the use of optional drop cable entry kits, allowing up to 4 flat drops or cables from 0.2" to 0.39" to use a single port. Additionally, each port has the capability to be paired with its own grounding lug if necessary. Closures can be configured with enough strain relief kits for 2 to 6 cables from the factory. For closures with less than 6, additional cables can be added through the use of additional cable strain relief kits sold separately.



### Slack Storage

A molded slack storage basket allows for use of the entire cross section of the closure to maximize storage. An optional segmented hinging basket is available to separate ribbon and loose tube slack, and can be locked in the upward position for access to expressed fibers below.



### Splice Trays with Modular Splice Holders

Splice trays are organized in a hinging array that automatically lock when tilted to the upward position for easy access to the splice trays and slack storage below. The universal splice module holds up to 18 single fusion, 6 mass fusion or 12 mass fusion double-stacked when using SWR, or 6 mechanical splices as well as devices such as PLC splitters. This eliminates the need for specifying and stocking multiple splice trays for multiple applications.

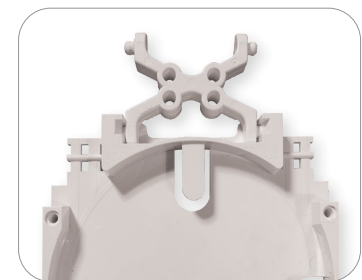
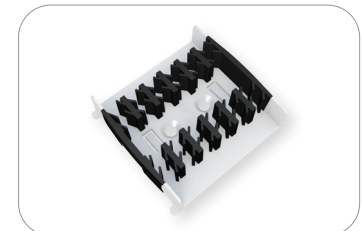
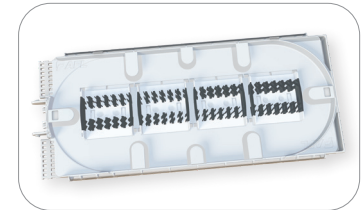
## Ordering Information

|               |              |                      |   |                 |                                   |                       |   |
|---------------|--------------|----------------------|---|-----------------|-----------------------------------|-----------------------|---|
| <b>AX</b>     | <b>2</b>     | <b>B</b>             | <b>L</b>  | <b>0</b>        | <b>2</b>                          | <b>6</b>              | <b>B</b>  |
| APEX CLOSURES | CLOSURE SIZE | BASKET TYPE          | TRAY TYPE   | NUMBER OF TRAYS | CABLE STRAIN RELIEF HARDWARE KITS | NUMBER OF GROUND LUGS | INNER BASKET                                    |
|               | 2 = X-2 Size | B = X-2 Sized Basket | X = No preinstalled tray<br>L = X-2 Tray Loaded with splice modules | 0<br>1<br>6     | 2<br>4<br>6                       | 0<br>2<br>6           | X = No Inner Basket<br>B = Include Inner Basket |

## Apex® X-2 Sealed Splice Closure

### Splice Trays and Splice Modules

Apex X-2 closures utilize X-2 size splice trays. Trays can be ordered fully loaded or half loaded with splice modules. For "rollable" type ribbon such as AFL's SpiderWeb Ribbon®, trays can be fully loaded for 48 double-stacked mass splices, or 576 fibers per tray. For standard ribbon, AFL recommends half loaded for 12 mass splices single-stacked, or 144 fibers. Adapter kits available to install FOSC® A-B optical trays.

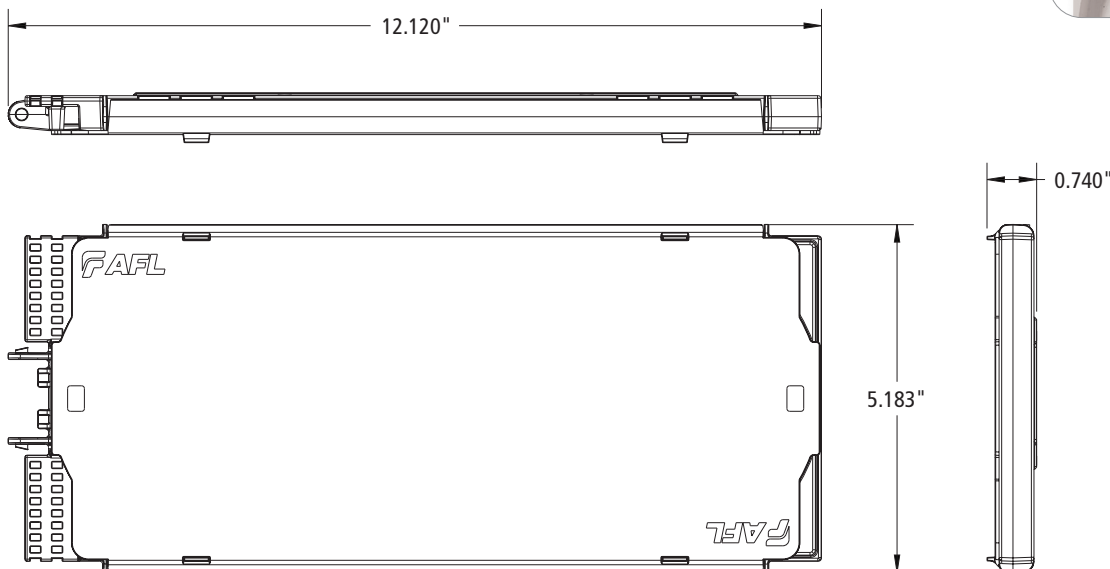


### Ordering Information

| DESCRIPTION   | TRAY CAPACITY |      | AFL NO.            |
|---|---------------|------|--------------------|
|   | SINGLE        | MASS |                    |
| X-2 Tray Loaded with Two Splice Modules   | 36            | 144  | AX-TRAY-2-2        |
| X-2 Tray Fully Loaded with Four Splice Modules (576 fibers per tray only recommended for rollable ribbon, e.g. AFL SWR) | 72            | 576  | AX-TRAY-2-4        |
| Additional splice module (18 single fusion triple stacked, 12 mass fusion double stacked, 6 mechanical) – Pack of 20    | -             | -    | AX-TRAY-MOD-20     |
| X-2 Tray Empty  | -             | -    | AX-TRAY-2-E        |
| KIT, APEX, A-B TRAY ADAPTER, 1 Kit of 6 pieces  | -             | -    | AX-ADPTR-ABTRAY-6  |
| KIT, APEX, A-B TRAY ADAPTER, 10 Kits of 6 pieces  | -             | -    | AX-ADPTR-ABTRAY-60 |

\*576 fibers per tray with mass fusion double-stacking (3456 total closure capacity) only recommended for 200 μm type rollable ribbon. For 250 μm, cut capacity in half with single-stacking

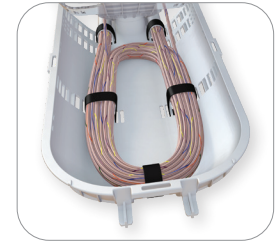
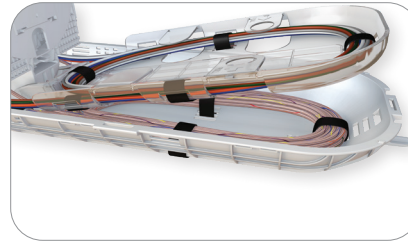
### Dimensions



## Apex® X-2 Sealed Splice Closure

### Slack Storage Basket and Accessories

The Apex X-2 slack storage basket is molded with a rounded cross section to efficiently maximize space inside of the cylindrical dome closure. The basket has optional accessories such as the segmented basket, which provides a “basket within a basket” to manage ribbon and loose tube slack separately.



### Ordering Information

| DESCRIPTION  | AFL NO.          |
|--|------------------|
| Clear segmented basket for X-2. Can be used in combination with the basket cover | AX-KIT-SBASKET-2 |
| Replacement slack storage basket tabs – Pack of 25                               | AX-KIT-BTAB-25   |

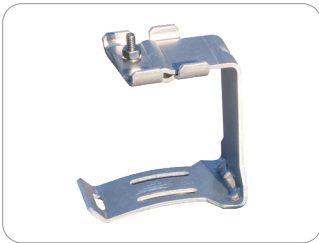
### Slack Length

| CABLE/COMPONENT  | TYPE OF OPENING   | STRIP LENGTH (INCHES) |
|--|---|-----------------------|
| WTC/SWR or Non-Matrix Ribbon   | Mid Sheath  | **111-134             |
|  | End Cut   | **54-90               |
|  |   |                       |
| Flat Matrix Ribbon Cable   | Mid Sheath  | *108-110              |
|  | End Cut   | *54-57                |
|  |   |                       |
| ***Loose Tube Cable  | Mid Sheath  | **111-134             |
|  | End Cut   | **54-90               |
|  |   |                       |
| <b>STORAGE</b>   |   |                       |
| Each additional basket storage loop  |   | 23-27                 |
| Each additional splice tray service loop   |   | 26-27                 |
| Sheath to basket for tube retention  |   | 8-11                  |
| <b>DEFINITION</b>  |   |                       |
| Midsheath  | Slack loop in basket, service loop in tray, center cut    |                       |
| End cut  | Slack loop in basket, service loop in tray, to far splice |                       |
| * Ribbon minimum is slack loop in basket, no slack waterfall splicing in tray                |   |                       |
| ** Minimum no service loop in splice tray - Maximum allowing for service loop in splice tray |   |                       |
| *** LT storage max tubes   | Additional tubes will decrease cable lengths              | 18 (432/24 per tube)  |

## Apex® X-2 Sealed Splice Closure

### Installation Accessories and Kits

The AFL Apex closure line has a variety of installation accessories kits to fit many applications. Additional accessories not listed here may be available by contacting AFL.



Apex™ Aerial Hanger Bracket



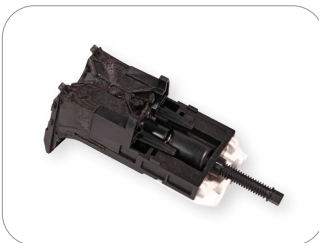
Apex™ Pole/Wall Mount



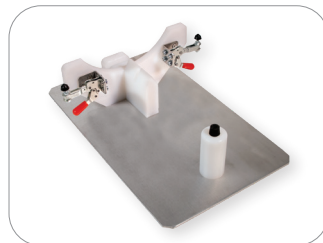
Mesh Transition Tubing



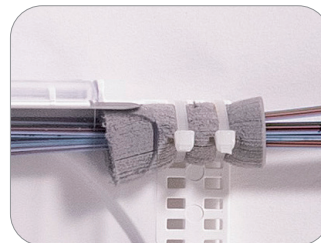
Ring Clamp Replacement Kit



Wedge Replacement Kit



Installation Stand



Foam Retention



Silicone Spiral Wrap

### Ordering Information

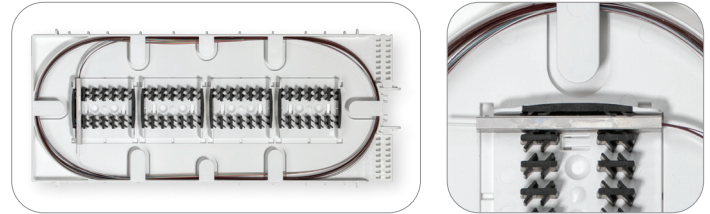
| DESCRIPTION   | AFL NO.             |
|---|---------------------|
| Aerial strand mount hanger kit  | AX-KIT-AERIAL-1     |
| Pole/wall mount kit   | AX-BR30             |
| 1/4" Colored Mesh Transition Tubing, 250' Spool   | AX-KIT-TUBE-014-XX* |
| Single Cable Strain Relief/Attachment Kit   | AX-KIT-CBLSTRN      |
| Multi-Drop Cable Entry Kit (fits up to 4 cables 0.20" to 0.39" in diameter or flat drop cable)                              | AX-KIT-DROP-4       |
| X-2 and X-2S Dome to Base O-Ring Replacement Kit  | AX-KIT-ORING-2      |
| X-2 and X-2S O-Ring Grease, Pack of 10  | AX-KIT-GREASE-10    |
| X-2 and X-2S Dome to Base Locking Ring Clamp Replacement Kit  | AX-KIT-CLAMP-2      |
| X-2 and X-2S Wedge Replacement Kit  | AX-KIT-WEDGE-2      |
| X-2 and X-2S Installation Stand   | FC104649            |
| Apex X-2 and X-2S Inner Base Gel Replacement Kit  | AX-KIT-GEL-2        |
| Apex X-2 Dome Replacement Kit   | AX-KIT-DOME-2       |
| WTC-SWR Bundle Splice Tray Retention Kit - Includes 25 foam grommets for retaining SWR bundles to splice trays              | HW000406            |
| Silicone Spiral Wrap, 5.5 Foot Length   | FC001657            |
| Velcro, 75 Foot Length Roll – For securing SWR bundles in the slack basket  | FC001759            |
| Apex Cable Bonding Kit (Bonds armored cable sheath to ground) – Alligator clip on one end, eyelet on other end – Pack of 10 | AX-KIT-GROUND-10    |

\*Replace "XX" with any of the following for colors per the TIA-598 color code - BL, OR, GR, BR, SL, WH, RD, BK, YL, VI, RS or AQ

## Apex® X-2 Sealed Splice Closure

### Splitter Splice Trays

Passive optical splitters, or PLCs (Planar Lightwave Circuits), can be provided preinstalled into the Apex X-2 splice tray. PLCs can either be installed and splice within the same tray, or provided with a separate dedicated tray for splicing, with fibers routed between trays using protective tubing. A third option provides one additional tray to separate input and output fiber splicing.



### Ordering Information

| DESCRIPTION   | SPLIT RATIO | AFL NO.         |
|---|-------------|-----------------|
| X-2 Tray with Four Splice Modules, (1) 1x2 PLC Splitter   | 1x2         | AX-TRAY-2-12-1  |
| X-2 Tray with Four Splice Modules, (1) 1x4 PLC Splitter   | 1x4         | AX-TRAY-2-14-1  |
| X-2 Tray with Four Splice Modules, (1) 1x8 PLC Splitter   | 1x8         | AX-TRAY-2-18-1  |
| X-2 Tray with Four Splice Modules, (1) 1x16 PLC Splitter  | 1x16        | AX-TRAY-2-116-1 |
| X-2 Tray with Four Splice Modules, (1) 1x32 PLC Splitter  | 1x32        | AX-TRAY-2-132-1 |
| X-2 Tray with (1) 1x2 PLC Splitter and Separate Splicing Tray with Four Splice Modules          | 1x2         | AX-TRAY-2-12-2  |
| X-2 Tray with (1) 1x4 PLC Splitter and Separate Splicing Tray with Four Splice Modules          | 1x4         | AX-TRAY-2-14-2  |
| X-2 Tray with (1) 1x8 PLC Splitter and Separate Splicing Tray with Four Splice Modules          | 1x8         | AX-TRAY-2-18-2  |
| X-2 Tray with (1) 1x16 PLC Splitter and Separate Splicing Tray with Four Splice Modules         | 1x16        | AX-TRAY-2-116-2 |
| X-2 Tray with (1) 1x32 PLC Splitter and Separate Splicing Tray with Four Splice Modules         | 1x32        | AX-TRAY-2-132-2 |
| X-2 Tray with (1) 1x2 PLC Splitter and 2 Separate Splicing Trays with Four Splice Modules each  | 1x2         | AX-TRAY-2-12-3  |
| X-2 Tray with (1) 1x4 PLC Splitter and 2 Separate Splicing Trays with Four Splice Modules each  | 1x4         | AX-TRAY-2-14-3  |
| X-2 Tray with (1) 1x8 PLC Splitter and 2 Separate Splicing Trays with Four Splice Modules each  | 1x8         | AX-TRAY-2-18-3  |
| X-2 Tray with (1) 1x16 PLC Splitter and 2 Separate Splicing Trays with Four Splice Modules each | 1x16        | AX-TRAY-2-116-3 |
| X-2 Tray with (1) 1x32 PLC Splitter and 2 Separate Splicing Trays with Four Splice Modules each | 1x32        | AX-TRAY-2-132-3 |

### Relevant Standards

| GOVERNING BODY | STANDARD CODE |
|----------------|---------------|
| Telcordia      | GR-771        |