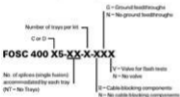


1. General Product Information

The FOSC 400 C5 and D5 closures are combination cable closures and splice organizers, providing mechanical seals and heat-shrinkable sleeves with hot-melt adhesives to environmentally seal fiber cable splice points.

FOSC 400 C5 and D5 closure kits are available in several configurations, as described by the kit naming convention described below:



Cables

The closures support a butt splice configuration with one oval cable entry port and five large round cable entry ports. Chart 1 (below, left) indicates each port's capacity.

The closures accommodate cable with any combination of the following characteristics:

Cable Types:

- Loose buffer tube (stranded fiber and ribbon)
- Central core tube (stranded fiber and ribbon)
- Slotted Core

Strength Member/Shield Types:

- Dual strength member
- Central member
- Multiple strength member
- Unshielded
- Shielded
- Double shielded

Fiber Types:

- Single-fiber (250 micron or 900 micron [tight jacketed]) and ribbon

Splices

The standard closure kit is supplied with one splice tray. Each FOSC 400 D5 splice tray holds six splice modules, each C5 splice tray holds two modules. The chart below identifies the number and type of splices accommodated by each type of splice module:

| Splice Modules | Splices Accommodated | FOSC D5 Closure | | FOSC C5 Closure | |
|----------------|----------------------|------------------|----------|------------------|----------|
| | | Splices per Tray | Tray Kit | Splices per Tray | Tray Kit |
| SM0 | Misc fusion | 26 | D Trays | 12 | C Trays |
| | Single fusion (80mm) | 36 | 36-2 | 12 | 12-2 |
| | Single mechanical | 36 | | 12 | |
| SM6 | Single fusion (80mm) | 48 | D Trays | 16 | C Trays |
| | Single fusion (90mm) | 48 | 48-2 | 16 | 16-2 |
| | Single mechanical | 24 | | 16 | |
| SM12 | Single fusion (80mm) | 72 | D Trays | 24 | C Trays |
| | Single fusion (90mm) | 72 | 72-2 | 24 | 24-2 |

* For SM12, use Tyco Electronics SM12/UV splice protectors, or other fusion splice protectors with a maximum recovered diameter of 0.100".

Locations

The closures accommodate unpressurized fiber cable in these locations:

- direct buried
- below grade
- above grade
- pole mount
- aerial

2. Warnings

As with any electrical equipment, various safety precautions should be noted when operating a hot air gun. Please take note of these warnings:

1. Keep the area clear of all combustible materials and gases, such as gasoline, solvents, and dirty rags. Consult your company-approved practice for procedures to clear and ventilate the work area to avoid the potential for fire and/or explosion.

Chart 1

| Port | Capacity | Cable Diameter Range (inches) |
|-----------|--------------------|-------------------------------|
| Oval | 2 cables | 0.4 to 1.0 |
| Round (S) | 1 or 2 cables each | 0.2 to 1.25 |

- The cleaning tissues provided in the kit are extremely flammable, and should not be exposed to excessive heat or open flame.
- Do not immerse the hot-air gun in water, as electrical shock could occur.
- Flash test the closure to no more than 5 psi.

3. Required Tools and Materials

You will need these tools and materials to install the closure:

- 1750 watt AC power source
- FOSC closure work stand (FOSC-ACC-Work Stand - optional)
- Strips and sheath knife
- Buffer tube cutter
- Hot air gun with tip (FOSC ACC CV 1881)
- Assorted hand tools, such as a hacksaw, screwdriver, pliers, crescent wrenches, can wrench
- White marking pencil
- Locally approved cleaning solution
- Tape measure
- Clean, dry cloths

4. Standard Components

The following items are included in the fiber optic splice closure kits:

Basic Components:

- base
- splice organizer tray(s) with dust cover
- velcro strap
- domes
- mechanical dome-to-base seal and O-ring
- closure mounting brackets

6. Supplementary Kits

The following chart identifies supplementary kits available for use with the FOSC 400 C5 and D5 closures, and briefly describes their uses.

FOSC 400 C5 and D5 Closure Accessory Kits (can be used with either closure)

| | |
|---------------------------|--|
| FOSC-ACC Cable Seal-1 NT | Cable sealing kit (T-tubular seal) for installing one cable in any round port |
| FOSC-ACC Cable Seal-1 BT | Same as above with cable blocking components |
| FOSC-ACC Cable Seal-1 NW | Wraparound cable seal (allows only) for use on any round port |
| FOSC-ACC Cable Seal-2 NW | Wraparound cable seal (allows only) for use on any oval port |
| FOSC-ACC Branch-Off-Clip | 25 branch-off clips plus aluminum tape for installing two cables in one port (Use with FOSC-ACC Cable Seal 1-XXX Kits) |
| FOSC-ACC D-D-Flag Seal | Optional re-entry/repair kit with desiccant, o-ring, and clearing tissues |
| FOSC-ACC D-Wash Bag | Contains a flame-retardant bag to be installed over the FOSC-400 D closure |
| FOSC-ACC CB Sleeve W | Wraparound sleeve for cable blocking looped cable in any oval port |
| FOSC-ACC T-Tube Ribbe-58" | Ribbon (7/32") Transportation tubes, 16" (six 12-fiber ribbons per tube) |
| FOSC-ACC T-Tube Lrgs-18" | Large (3/16") Transportation tubes, 16" (for 12-fiber loose buffer tubes) |
| FOSC-ACC T-Tube Smls-18" | Small (5/32") Transportation tubes, 16" (for 6-fiber loose buffer tubes and funnels) |
| FOSC-ACC Filter Fan Gird | External geyser or "TED" kit to isolate one cable ground through port |
| FOSC-ACC Aerial Clamp | Clamp for mounting A, B, or D closures to an aerial strand |
| FOSC-ACC Desiccant | Bags of desiccant (75g). Use one bag in A and B closures, two bags in D closures (optional) |
| FOSC-ACC Dome Holder | Holds dome and base together while dome/flag clamp is installed |
| FOSC-ACC Port Rods -0.5 | Provides a .5" plug to be used with cable seals in closing open ports |
| FOSC-ACC Funnels | Funnel for routing stranded fibers from central core tube cable to splice trays |

Cable Termination Components:

- 1 heat-shrinkable cable seal for the oval port
- aluminum tape
- branch-off clip
- abrasive strip
- clearing tissues
- bond wires and clamps
- 2 distribution funnels and caps
- 2 heat-shrink tubes for use with funnels
- small transportation tubes
- large transportation tubes
- buffer tube identification labels
- tie wraps
- installation instructions

Cable Blocking Components**:

- yellow adhesive strips
- adhesive foam rings
- clear heat-shrinkable tubes
- abrasive strip
- clearing tissues
- tie wraps
- installation instructions

** Cable blocking components are not included in all kits. Refer to the Naming Convention on page 1 for further details.

5. General Installation Notes

To ensure the proper performance of the heat-shrinkable sleeve, take note of these precautions:

- Do not install the heat-shrinkable sleeve at temperatures below -1°C (30°F).
- If the cable is wet, dry the cable before installing the heat-shrinkable sleeve. Steam generated during heating will cause gaps in the adhesive, resulting in a faulty seal.

FDSC 400 CS Closure Accessory Kits

| | |
|------------------------|--|
| FDSC ACC C Tray 12 | C splice tray with two SM12 splice modules |
| FDSC ACC C Tray 24 | C splice tray with two SM12 splice modules |
| FDSC ACC C Basket | Basket for storing stack of splices (up to 160 splices) without splicing ribbons |
| FDSC ACC C Tail Basket | Tailer version of splice basket with more storage space |

FDSC 400 DS Closure Accessory Kits

| | |
|---------------------------|---|
| FDSC ACC D Trays 26 | D splice tray with six SM6 splice modules (30 splices/tray) |
| FDSC ACC D Trays 30 | D splice tray with six SM6 splice modules (48 splices/tray) |
| FDSC ACC D Trays 72 | D splice tray with six SM12 splice modules (72 splices/tray) |
| FDSC ACC D Trays 24 | D ribbon splice tray with three SM6 splice modules (300 core tray to double the length of normal trays) |
| FDSC ACC D Basket | Basket for storing stack of splices (up to 160 splices) without splicing ribbons |
| FDSC ACC D Basket Tail | Tailer version of splice basket with more storage space |
| FDSC ACC D Ribbon Splicer | Splices into fiber into cable into ribbon and transposition tubes onto trays |
| FDSC ACC D Side Mount | Side mounting closure for side of tray |
| FDSC ACC D Tunnel Filter | Filter and ribbon transposition tubing for routing ribbons from cables to trays |

7. Cable Preparation

Cable core blocking is optional with the closure kit. If cables are to be blocked prior to installation in a splice closure, ignore the instructions in this section and refer to the instructions on cable preparation included with the Cable Blocking Components.

This document is that below address the preparation of loose buffer tube and central core tube (optional) fiber optic cables. Preparation of cables ends with red-green color is explained. Refer to the appropriate section.



Figure 1

| Fiber Type | Cable Type | Cable Bulk (See Sect. 6) | Minimum Splicing (See Sect. 6) |
|---------------------|-------------------|--------------------------|--------------------------------|
| Stranded Loose Tube | Loose Buffer Tube | 7.1 | 7.2 |
| | Central Core Tube | 7.3 | 7.5 |
| Ribbon Fiber | Loose Buffer Tube | 7.6 | 7.7 |
| | Central Core Tube | 7.4 | 7.5 |

| Cable Type | Opening Location | FDSC 400 CS Closure Min. & Max. Suggested Storage Length *** | FDSC 400 DS Closure Min. & Max. Suggested Storage Length *** |
|------------------------------|------------------|--|--|
| Loose Buffer Tube | Midspan | 30" - 112" in 2-bank (60") | 100" - 140" in 2-bank (60") |
| | End | 30" - 90" in 2-bank (60") | 100" - 120" in 2-bank (60") |
| | End | 40" - 70" | 50" - 70" |
| Loose Buffer Tube Basket | Midspan | 30" - 80" | 70" - 140" |
| | End | 30" - 40" | 70" - 80" |
| Central Core Tube (optional) | Midspan | 40" - 80" | 70" - 140" |
| | End | 30" - 40" | 70" - 80" |

* 1.00" (25.4 mm) gap directly to tray - 20" out in center between one end of loop in basket and splice tray end tray
 ** Midspan - 40" inside loop in basket in front of cover and over the tray - 80" loop to the end of the basket and over the tray
 *** The Maximum and length is based on assuming that the cable fiber core group density is 1 or less. The Maximum end length is based on using the end of the cable.



Figure 2

7.1 Loose Buffer Tube Cable End Preparation

To prepare the ends of loose buffer tube cables, follow these steps:

1. Clean the cable and remove the outer cable sheath and shield if present (see chart above for lengths). Remove the strand and fiber yarns to the ring cut.
2. Cut (second) member 3" from the ring cut. (Figure 3)
3. Strip away any insulation present on the central members all the way back to the ring cut.
4. If a shield is present in the cable, tab the cable 1" from the ring cut. Crimp the strips for bond clamp to the tab in the sheath.
5. If you are using a U-Bond clamp on double armored cable, remove a 1" square section of the outer cable sheath around the tab. (Figure 3) Slide the lower plate of the lasted clamp under the inner shield so that the stud bolt works up through the tab. Place the upper plate of the U-Bond clamp over the tab. Place a double-eyed fiber wire (available in the FOSC ACC closure bond wire kit) over the bolt. Insert the nut on the bolt and tighten it. Optionally, you can cut off the excess stud bolt and file it flush with the nut. (Figure 3)

Important: Do not use braided or stranded ground wire when installing a ground through a port on the FOSC-600 Closures. A solid ground wire is required to make a leak path and make a proper seal.

Note: For flexible buffer tube cable, skip steps 6 - 10.

6. Attach cable end to the FOSC closure workstation using a tie strap as shown. (Figure 4)
7. Carefully ring cut and remove all but three inches of each buffer tube. Clean the remaining buffer tubes, exposed fibers, strength members, and 6" of the cable sheath with a cloth and company approved cleaning solution. (Figure 5)
8. Install one transportation tube on each buffer tube and slide it down to the sheath ring cut.

Note: Two sizes of transportation tubes are provided for six-fiber and twelve-fiber buffer tubes.

9. Wrap cable with vinyl tape from 1" below the bond clamp to 2" above the ring cut to help transportation tubes in place.
10. Place an identification marker on each transportation tube. On feeder tubes (in cable), place the markers 6" above the ring cut. On distribution tubes (out cable), place the markers 9" above the ring cut.

7.2 Loose Buffer Tube Cable - Midspan Opening Preparation

1. Clean the cable and remove cable sheath (and shield if present). For lengths, refer to chart on page 4.
2. Prepare both sides of the midspan opening as described in Section 7.1, but do not remove buffer tubes from fibers that will be tapped, spliced, through the closure. Refer to the instructions included with the required basket kit for buffer tube storage procedures.

7.3 Central Core Tube Stranded Fiber Cable End Preparation

The following procedure describes the use of funnels to distribute fibers to the organizer trays. An alternative procedure is to route the entire central core tube to the buffer tray.

1. Clean the cable and remove outer cable sheath. For lengths, refer to chart on page 4.
2. If dual strength members (e.g., LDC) or multiple metallic strength members (e.g., composite) are present, expose each strength member and cut it off 3" from the ring cut. (Figure 6)
3. If multiple non-metallic strength members (e.g., FNT) are present, cut them off at the ring cut.

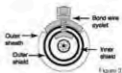


Figure 3



Figure 4

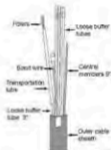


Figure 5

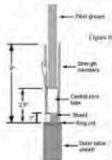


Figure 6

- If metal shield is present: Remove all but 1" of the metal shield. (Figure 6) Pre-wrap a 1" ball in the exposed metal shield where the shield overlaps. Crimp the bond clamp onto the edge of the shield.

Important: Do not use braided or stranded ground wire when installing a ground through a port on the FOOSC 400 closures. A solid ground wire is required to prevent a leak path and make a proper seal.

- Attach the cable to the FOOSC closure work stand with a tie wrap. (See Figure 4)
- Cut the central core tube 9" from the ring cut and remove the excess tube. (Fig. 8)
- Separate the fiber groups and clean the exposed components with a clean cloth and company approved cleaning solution.
- Slide the small end of the distributor funnel over the fiber groups, and slide it down over the central core tube.
- Place one fiber group in each hole of the distributor cap. (Fig. 7)
- Carefully slide the distributor cap down until it seats in the funnel.
- Place the fibers from each distributor cap hole into a transportation tube, and slide the tube down into the hole. (Fig. 8)
- Place an identification marker on each transportation tube. On feeder tubes (in cables), place the markers 0" above the ring cut. On distribution tubes (oval cables), place the markers 0" above the ring cut.
- Place a tie wrap 1" below the ring cut. Slide the 4" long black heat-shrinkable tube over the cable components and allow it to rest on the tie wrap. The top of the tube should be roughly 1/2" below the top of the funnel. (Fig. 8)
- Place a tie wrap around the transportation tubes to hold them in place.
- With the CV1561 on setting 6, begin shrinking the tube around the top of the funnel. After recovering 1" of tube on funnel, pause for 15 seconds to allow the adhesive to set on the funnel. Complete shrinking the tube. (Fig. 9)
- After the tube has cooled, remove the tie wraps.

7.4 Central Core Tube Ribbon Fiber Cable End Preparation (For Installation in the Oval Port)

Important: A metal slack basket (FOOSC ACC C or D Basket) and ribbon sized transportation tubing (FOOSC ACC T Tube Ribn) are required. The FOOSC ACC D closure ribbon router tray can be used to help route ribbons and transportation tubes from the slack basket up onto splice organizer trays (used in the D-airc basket only).

To prepare the ends of central core tube ribbon cable for installation in the oval port, follow these steps:

- Perform Steps 1-5 in Section 7.3.
- Carefully cut the central core tube 9" from the strength ring cut (Figure 10).
- Separate the ribbons and clean the exposed components with a clean cloth and company approved cleaning solution. Stack the ribbons in the order in which they appear in the central core tube. Temporarily wrap a piece of vinyl tape around the ribbons about 1" from the tube to help keep the ribbons stacked.

Note: If the ribbons are not stacked properly, or if they are twisted, light signals may be attenuated.

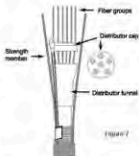


Figure 7



Figure 8

Figure 8

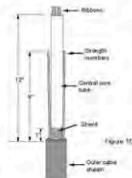


Figure 10



Figure 10



Figure 11



Figure 12

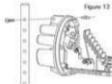


Figure 13

7.5 Central Core Tube Cable Stranded Fiber and Ribbon Midspan Opening (for installation in the Oval Port)

Important: If using ribbon cable, a metal slack basket (FOSC ACC C or D Basket) and ribbon sized transportation tubing (FOSC ACC TTube Ribs) are required. If using stranded fiber cable, expressed fibers are stored on the bottom splice tray and additional trays may be required.

1. Clean the cable and make two ring cuts, centering the point at which the cable will be spliced. Remove the outer cable sheath between the ring cuts, with the length of cable sheath to be removed specified in the chart on page 6.
2. Prepare both sides of the midspan opening as described in Section 7.4.

7.6 Loose Buffer Tube Ribbon Cable Ends

Important: A metal slack basket (FOSC ACC C or D Basket) and ribbon sized transportation tubing (FOSC ACC TTube Ribs) are required.

This section pertains to loose buffer tube cable that contains ribbons inside the individual loose buffer tubes. To prepare the cable, follow the instructions in Section 7.1 of this practice, but leave 5" of each loose buffer tube intact beyond the sheath ring cut. Do not install transportation tubes on the loose buffer tube ends.

7.7 Loose Buffer Tube Ribbon Cable Mid-Span Openings

Important: A metal slack basket (FOSC ACC C or D Basket) and ribbon sized transportation tubing (FOSC ACC TTube Ribs) are required.

This section pertains to loose buffer tube cable that contains ribbons inside the individual loose buffer tubes. A mid-span opening of loose buffer tube ribbon cable can only be installed in the oval port. To prepare the cable, open the cable, exposing the loose buffer tubes. (Length of cable to be opened is specified in the chart on page 4.) Prepare as in Section 7.3, removing all but 5" of each buffer tube. Do not cut ribbons or install transportation tubes.

Splice Closure Installation Instructions

Figure 10 indicates that the oval port side of the base is the feeder (or in cable) side of the closure, and the opposite side is the distribution (or out cable) side.

8. Remove Dome/Base Seal

1. Push the handle to the side to release the pin from the notch, then lift the handle. See Figure 11, Step 1.
2. Hook the "teeth" of the handle behind the two posts and pry open one half of the clamp. See Figure 11, Steps 2 and 3.
3. Move the handle out of the way and gently tap the other half of the clamp to release it from the dome.
4. Support the dome before removing the clamp. Remove dome and O ring. Hang O ring on top of dome.
5. Protect dome from dirt during installation. DO NOT SIT ON DOME!
6. Attach the closure base to the FOSC closure work stand using a nut and bolt. (Figure 12)

Note: Position the work stand post on either side of the closure flanges to avoid blocking the port you are working on. (Fig. 13)

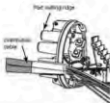


Figure 14

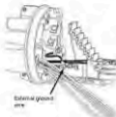


Figure 15

Ground feedthrough studs



Figure 16



Figure 17

9. Install Cables

1. Select the appropriate port to cover on the base. These instructions assume that the seal port is selected.

Note: An oval port seal is included with most CS and DS Kits. If you intend to open a round port, you will need one FOISC ACC closure cable seal 1XX kit to seal each opened round port. (See Section T2)

2. Cut the end of the selected port at the ridge with a hacksaw (Fig. 14).

Important: Slide tubular cable port seal over cable(s) before installing cable(s) in the port. The arrow on the seal should point at the base. If you forget this step, you may need to order a replacement oval port sleeve.)

3. Insert the cables through the port. Align each cable so that the sealed end of the cable block (if present) is flush with the inside edge of the closed port. If no cable block is used, align inside edge of port with the end of the vinyl tape wrap (knee buffer tube cables), or the distribution funnel cap (aircraft coax tube cables). For cables installed in the top port, place the distribution funnel inside or on, and the header (if cable on the top side. (Figure 14)

B.1 Bond and Ground Metal Components

Shielding components are installed on the closure kit. This structure supports two methods of external grounding.

- Grounding using the FOISC ACC Flex Kit Ground Kit (grounded or isolated (potentially) (Figure 15).
- Grounding using two ground feedthrough studs (Figure 16).

Important: Do not use braided or stranded ground wire when installing a ground through a port on the FOISC ACC closures. A solid ground wire is required to prevent a leak path and make a proper seal.

Various configurations of the procedures described in this section can be used to bond and ground cables and closure components in accordance with company approved grounding standards.

Note: All steel strength members are bonded in common when captured under the square member.

Bonding Cables Installed in the Oval Port or Bottom Round Port

Insert the two provided bonded copper bonding cables attached to the tray bracket. One end of each bonded copper bonding cable is attached to the metal tray bracket. The other end is an equal size which ferrul wires from cables will be attached with the supplied nut and lock assembly (Figure 17). Each twisted-fiber bonding cable can accommodate two ferrul wires from fiber optic cables. Cables are now bonded with the tray, which can be externally grounded using feedthrough studs or through external ground wires.

Bonding Cables Installed in the Four Top Round Ports

Insert the "buckled" ferrul wire spacers between the left bond and square member opposite the port being used. Do not tighten the lock until all four members are placed under the station.

9.2 Attach Strength Members

To attach strength members from the cables to the metal tray bracket, follow these steps:

1. Align the strength member with the square washer with which it will be attached to the base. Trim the strength member 1/4" beyond the edge of the square washer.
2. Loosen the square washer and place the strength member(s) underneath it. Tighten the square washer to secure the strength members against the base. (Figure 17)
3. When using the top four round ports, one bolt captures both the bond wire eyellet and the washer. It may be necessary with large central members to place a piece of the central member under each side of the washer to keep the washer level.

9.3 Seal Cables in Oval Port

To seal cables in the oval port, follow these steps:

1. Clean the port and 8" of cable sheath beyond the port edge with the supplied cleaning tissue. (Figure 18)
2. Abrade the port and 8" of cable with the supplied abrasive strip, and remove any abraded material from the port and sheath with a clean, dry cloth.
3. Slide the tubular cable port seal up around the port and cable. Be sure that the inside edge of the tube butts against the closure base. Squeeze the tube down onto the cable and place a white pencil mark on the cable just beyond the end of the tube.
4. Slide the tube back off the port.
5. Wrap one lap of aluminum tape around each cable. The edge of the tape closest to the closure should be 1/2" inside the white mark on the cable as shown in Figure 19.
6. Slide the tube back onto the port, being sure that the edge of the tube butts against the closure base. (Figure 20)
7. Install the branch-off clip as shown. The clip's base must touch the tube. (Figure 21)
8. Tie the cables together with a tie wrap 1" beyond the end of the tube.
9. Using the CV1581 hot air gun on setting 10, begin shrinking the tube at the end closest to the base of the closure. Direct the air around the tube until the green paint turns black.
10. Continue heating the remainder of the tube as evenly as possible until it has completely conformed to the cable(s).
11. The seal is completely installed when melted adhesive appears at the cable end of the tube around the branch-off clip, and all green thermochromic paint on the tube has turned black.

Note: Do not overheat the tube or apply excessive heat to plastic parts of closure base.

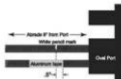
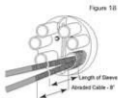


Figure 19

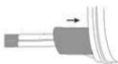


Figure 20

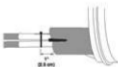


Figure 21



Figure 22

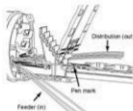


Figure 23

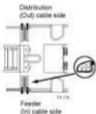


Figure 24

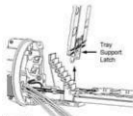


Figure 25

10. Fiber Organizing and Splicing

10.1 Loose Buffer Tube Cable - Stranded Fiber and Central Core Tube Cable - Stranded Fiber with Funnels

Note: For mid-span openings, expressed fibers and/or buffer tubes are stored in a FOISC ACC C or D Basket.

1. If multiple trays are present, fill the bottom tray first. Use the tray support attached to the bottom of the second tray to hold it out of the way. (Figure 22)
2. Remove the tray cover and route the "feeder" (in) and "distribution" (out) tubes to the appropriate side of the tray (Fig. 23)
3. Place a pen mark on each tube 1/8" beyond the tie-down slots. Use a buffer tube cutter to cut each tube at the mark, and remove the excess tube from each fiber group. (Figure 23)
4. Wrap the end of the cut buffer tube with loose buffer tube (LBT) wrap and secure the tubes to the tray with tie wraps. Tubes will stack under the tie wrap as shown. (Figure 24)
5. Arrange the fiber around the tray for storage. Replace the tray cover.
6. Repeat Steps 1 - 5 for each tray until all fiber has been stored in a tray.

10.2 Central Core Tube Cable - Stranded Fiber (Alternative Method)

If funnels are not used, route both central core tubes directly onto the feeder side of the bottom splice organizer tray. Attach the core tubes with two tie wraps. The unspliced fibers are stored in the bottom tray. Remove the splice modules if necessary. Add inter-tray jumpouts as described in Section 10.5 to route the fibers onto upper trays for splicing.

10.3 Central Core Tube and Loose Buffer Tube Cable - Ribbon Fiber

Route central core tubes or buffer tubes into a FOISC ACC basket. Follow instructions included with the FOISC ACC basket to route the ribbons onto upper trays for splicing using ribbon-sized transportation tubes. Ribbons can not be stored on a single tray. Slack has to be pulled back to the basket after splicing. A ribbon tray is available for the FOISC 400 DS only (FOISC ACC D Tray Ribn-24 kit). Ribbons can be stored on that tray as directed in the instructions included with the tray.

10.4 Add/Remove Splice Trays

Additional splice trays are available in the FOISC ACC C and D tray kits. To add splice trays, put the tray support latch down, hold the tray vertically over the tray holder bracket, and insert the tray hinge into the next unoccupied slot on the tray holder bracket. Put the tray support latch up to lower the tray.

To remove splice trays, reverse this procedure. (Figure 25)

10.5 Add Insetray Jumpers

If fiber placed on one tray is to be spliced with fiber from another tray or basket, you must use an insetray jumper to route the fiber to the desired tray. To create an insetray jumper, follow these steps:

1. Place appropriate insetray identification markings on a transportation tube. (Initially ID numbers are marked "110" through "610" and "1" through "6", to indicate which tray the jumper came from and which tray it is going to.)
2. Thread the desired fibers through the marked transportation tube (now called the insetray jumper).
3. Secure one end of the insetray jumper to the originating splice tray with ties to straps if you have to remove splicing tie wraps, cut and replace them one at a time to avoid making existing transportation tubes.
4. Guide the jumper through the opening in the tray mounting bracket to the appropriate destination tray and position it in the tray. (Figure 26)
5. With a span, mark the jumper 1/4" beyond the tie wrap slot. Use the buffer tube cutter to cut the jumper at the mark. Place LPT wrap at the end of the cut tube and secure the jumper to the splice tray with ties or straps. The fibers may now be spliced or applied.

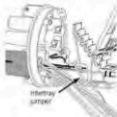


Figure 26

10.6 Splice Fibers and Store on Trays

Fiber splicing should be done in compliance with company-approved practices. The specific buffer tube fiber splicing engineering techniques to be followed:

1. Always begin splicing with the bottom tray. Lift the remaining trays and secure them with the top support on the underside of the second tray.
2. Remove all stored, unspliced fibers from the tray and save those that will be spliced. Refer to the splice manufacturer's instructions for directions on fiber splicing.
3. Store the fiber considered splicing in the top splice slot (the slot farthest from the trays). Cut the slack loops around the tray in an orderly fashion. The splice modules can be moved or removed to accommodate your splice arrangement; however, the nearest splice module (the one closest to the fringe) cannot be closer to the trays than its position in Figure 28 indicates for the FOSC 400 I/O closure. No more than six modules can be placed in one splice tray for the FOSC 400 I/O closure, no more than two for the FOSC 400 CS closure. Splice arrangements by the closure are listed in Section 1.

Note: Protect and strain-relieve fusion splices with fusion splice support sleeves or similar company-approved devices. It is not necessary to use silicone or similar

compounds to secure the fibers in the splice holders.

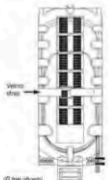
4. Subsequent splices should be stored in the tray from the top slot down. Slack loops can be secured under the tabs around the outside edges of the tray and in the spaces between splice modules. (Figure 27)
5. When you have completed all the splices in the tray, replace the tray cover.
6. Secure all trays to the bottom tray bracket with the Velcro straps as shown. (Figure 28)

Velcro is a trademark of Velcro Industries B.V.



(D tray shown)

Figure 27



(D tray shown)

Figure 28

11. Closing and Mounting Closure

11.1 Install Dome

1. If desiccant is to be used (optional - not supplied) install 150 grams of desiccant on top of the uppermost splice organizer tray. Secure it in place with the supplied Velcro fastener strap.
2. Clean the o-ring and the o-ring seating area with a clean, dry cloth. Use clean water or alcohol wipe if necessary. Sealing surfaces must be free of contaminants such as cable grease, cable threads, fibers, dirt, and dust. Inspect for damage. Re-install the o-ring.
3. Mount dome on base, aligning white marks or arrows on dome and base. If desired, use FOSC ACC closure dome holder to hold dome and base together while installing clamp. Install clamp around the base/dome interface, removing dome holder, if used.
4. Position feet of handle in front of the two posts and push down on the handle to pull the two halves of the clamp together. See Figure 29, Steps 1-3.
5. Continue to push handle down until the small pin on the handle straps into the triangular hole in the clamp. See Figure 29, Step 4.
6. A security lock or tie wrap may be inserted through the round holes in the handle and clamp to lock the closure.

11.2 Test Seals (Kits with Valves Only)

Ensure that all heat shrinkable parts are cool to the touch. **Pressure test the closure with no more than 5 psi.** Thoroughly soap all seals and the valve to check for seal integrity.

Important: After flash testing, bleed all pressure from the DS closure through the valve.

11.3 Marbhole Installation for the FOSC 400 DS Closure Kit

When the closure has successfully completed testing, it can be mounted for storage. For marbhole installations, slide the mounting brackets over a mounting rod or pipe (1-1/4" galvanized water pipe). Mount the brackets to the dome and base as shown, (Figure 30) The mounting rod is not supplied. For aerial applications, use the optional FOSC ACC closure aerial clamp kit. For wall or pole mount applications, use the FOSC ACC DS closure pole mount kit.

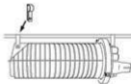
Note: The FOSC 400 DS closure requires the FOSC-ACC Wall/Pole Mount kit for storage on a pole or wall. Mounting instructions are included with the kit.

To strand-mount the FOSC 400 DS closure, use either the FOSC-ACC-UNIV-AERIAL-CLAMP or the FOSC-ACC-LASHING STRAPS kit.

To pole or wall-mount the FOSC 400 DS closure, use the FOSC-ACC Wall/Pole Mount kit.



Figure 29



(D closure shown)

Figure 30

12. Adding Cables

Adding cables to a sealed closure requires additional cable seal kits. Cable seal kits are available in several configurations, as described by the kit naming convention described below:



13. Removing Cable Seals

Important: When removing cable seals from a closure, first remove the dome and make sure that the cable's strength members are securely attached to the closure's base.

1. Use heat the seal with a hot air gun.
2. Lightly score the seal with a knife until a split appears in the seal.
3. Apply heat to the split until it runs the length of the seal.
4. Pull the seal away from the cables and closure with a pair of pliers.
5. Any old adhesive remaining on the cables and closure can remain in place.
6. If necessary, cables can be replaced with half-inch plastic rods sold as FOSC ACC closure part rod 0.5 kits.

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