tyco Electronics

FOSC-400A8

INSTALLATION INSTRUCTION

Fiber Optic Splice Closure with integrated Organizer System

TELECOM OUTSIDE PLANT

Content

1 General

The FOSC-400A8 can be installed in direct buried, manholes or aerial locations.
The FOSC-400A8 closure system has one oval cable entry port which can handle 2 cables (e.g. looped) cable and 8 small circular ports.
The kit content listed in this installation instruction reflects the standard content. Alternative configurations are possible.
All splice trays can accommodate a maximum of 24 fusion splice protection types such as the TYCO SMOUV-1120-series. Some types of trays accommodate most common types of mechanical splice protections.

2 Kit content

2.1 Content FOSC-400A8-XXX-1-NNN

- Dome
- Clamp
- Base with tray
- Loose tube storage sleeve
- Oval outlet seal kit
- Installation instruction
- O-ring
- Desiccant

Tray kits

FOSC-A-TRAY-XX-1
- Tray for XX splices
- Tray lid
- Tie-wraps
- 4 large/small transportation tubes
- Tray support wedge

Sealing kits

FOSC-A8-CSEAL-1-NT
- Round port seal including:
  - 1 screw and 1 washer for the strength member attachment

FOSC-A-CSEAL-2-NT
- Oval port seal kit

Re-entry kit

FOSC-A/B-O-RING-SEAL-KIT
- Sealing ring
- Desiccant (silica gel)
- Cleaning tissue

Tooling

FACC-HEAT-GUN-220V
- Hot air gun CV 1981 (1600 W) and reflector PR 26
  Min. required hot air temperature : 350°C

Accessories

FOSC-A/B-POLE-MOUNT
- Mounting kit
- Accessories for pole mounting or wall securing

FOSC-A-SHIELD-CON-KIT
Only for the incoming cable in the oval port.

FOSC-A/B-VAULT-BAG
- Flame retardant bag to cover closure for vault application

FOSC-WORK-STAND
- FOSC holder device.

FOSC-A/B-MOBRA
- FOSC holder device

FOSC-A/B-UNI-MOUNT-A	strands
FOSC-A/B-UNI-MOUNT-P	pole

2.2 General precautions

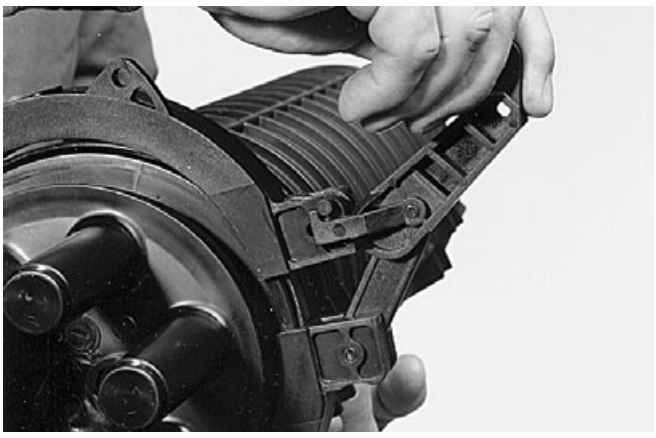
- Do not use damaged sleeve nor trim heat-shrinkable sleeve before installation.
- The FOSC-400A8 closure can be installed at temperatures between -1°C and +45°C.
- Generators used should have enough capacity for the hot air gun utilisation.

Optical fiber infrastructure network elements may contain end of optical fiber attached to the optical output when the device is operational. Laser radiation can seriously damage your eyesight.

Please follow your local safety guidelines.

Loose tube cable	Window cut 2.4 m	Drop cable 1.2 m
Cable diameter:	oval port 10-25 mm round port 5-10 mm	

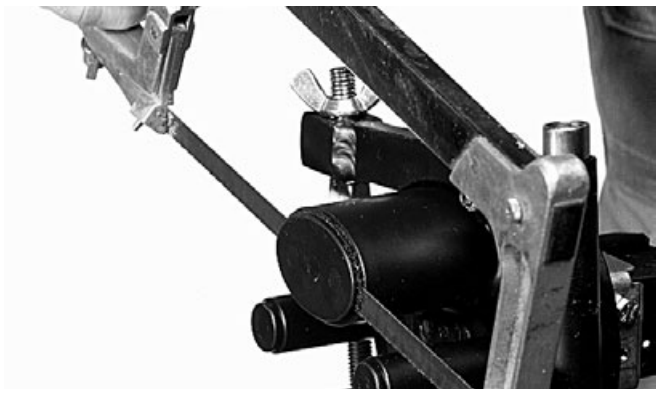
3 Cable preparation



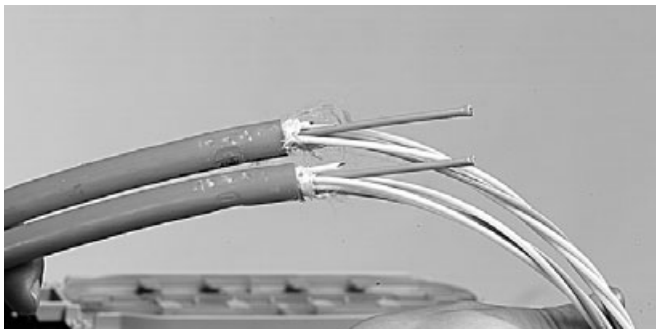
3.0 Open and remove the clamp. Remove the dome and the O-ring.
Remark: take care with the O-ring and the sealing area (surface) on the base and dome (avoid damaging) . Clean only with clear water or with the cleaning tissue, if needed.

3.1 Looped cable installation

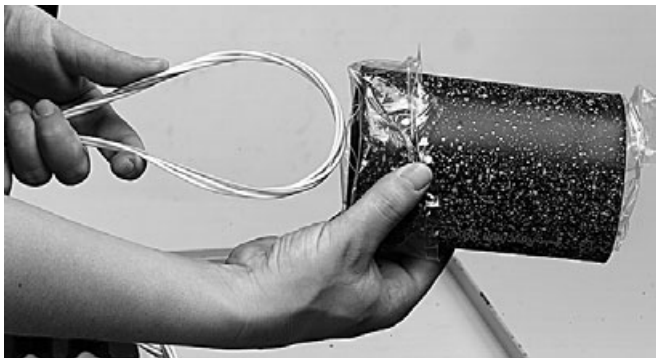
3.1.1 Make a window cut of 2.4 m.



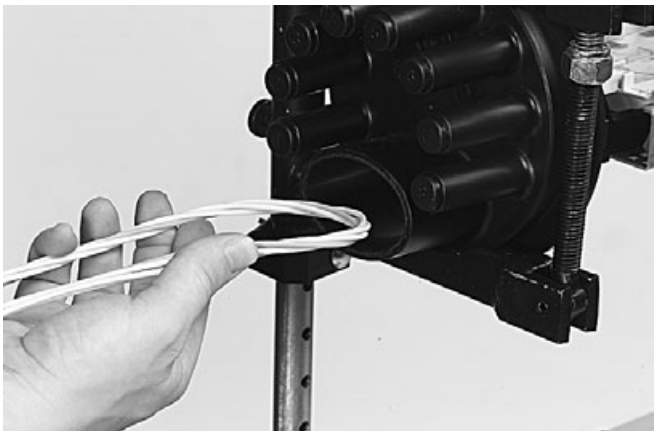
3.1.2 Open the oval port, the cutting wire can be used or hacksaw.



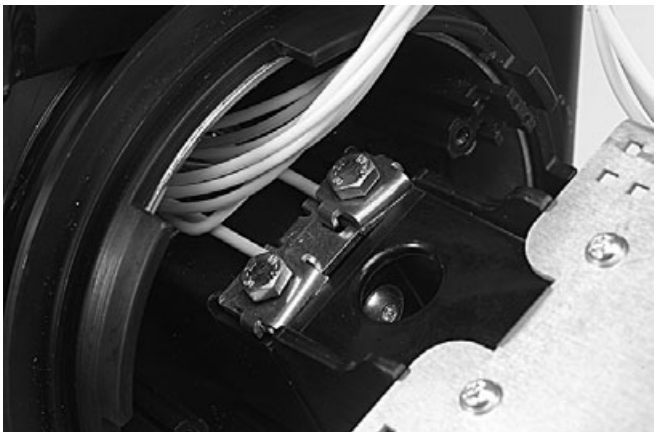
3.1.3 Cut the strength member at 60 mm from the cable jacket.



3.1.4 Take the oval sleeve and place the packaging bag that has been opened on both sides in the sleeve to protect the hot melt inside the sleeve for dirt and grease.
Check the arrow on the sleeve, it should point towards the base.



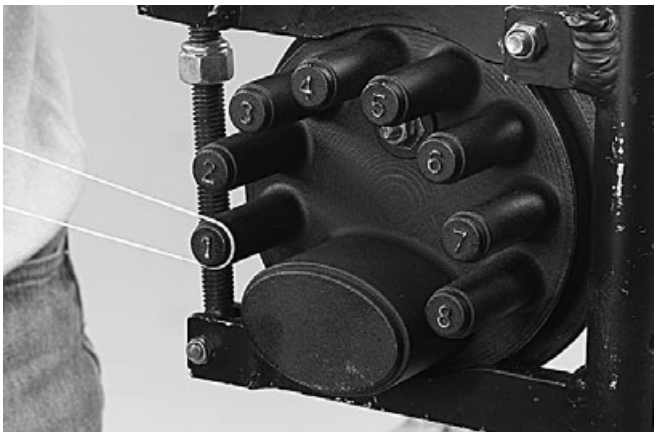
3.1.5 Push the loose tubes through the oval port.



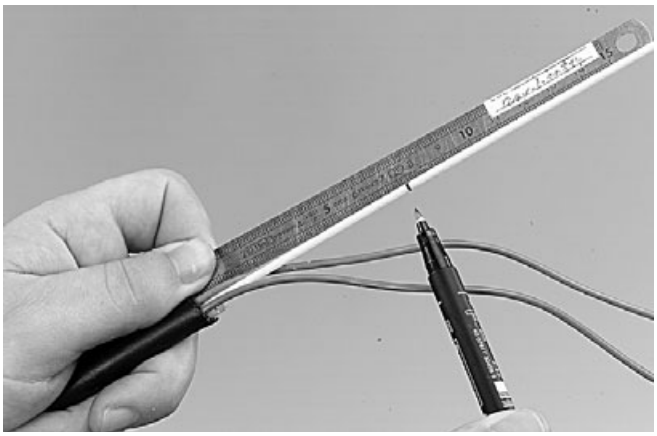
3.1.6 Secure the strength members.

3.2 Drop cable installation

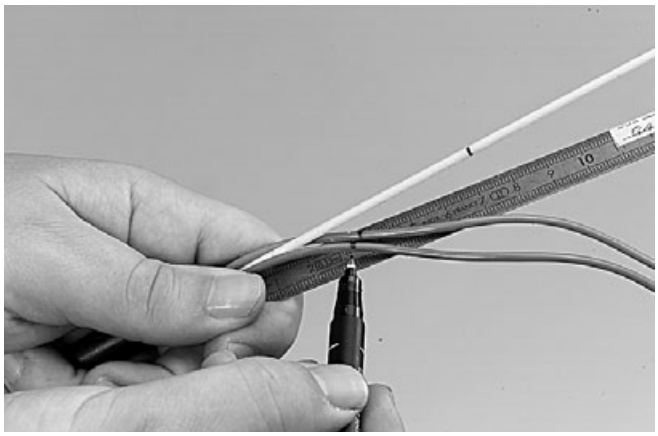
3.2.1 Strip the cable over a length of 1.2 m.



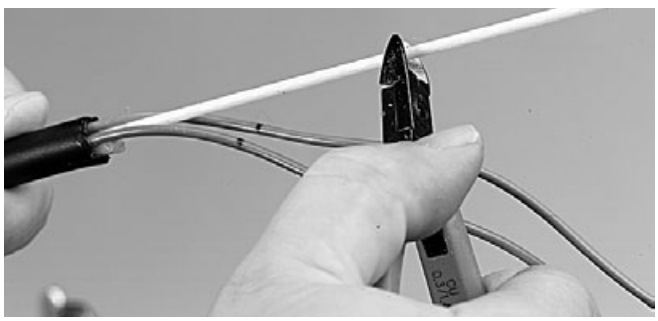
3.2.2 Open the round port, the cutting wire can be used or a hacksaw.



3.2.3 Mark the strength member at 75 mm from the cable jacket.



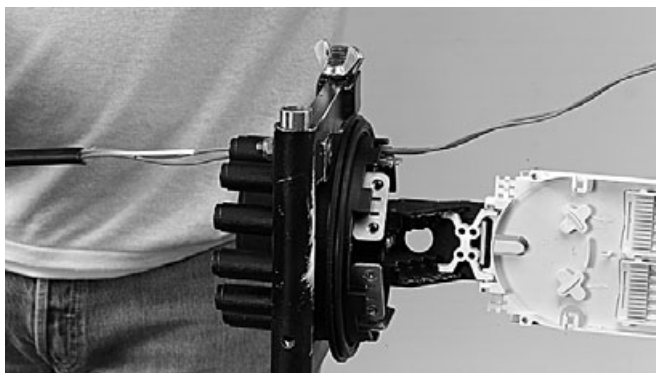
3.2.4 Mark the loose tubes at 45 mm from the cable jacket.



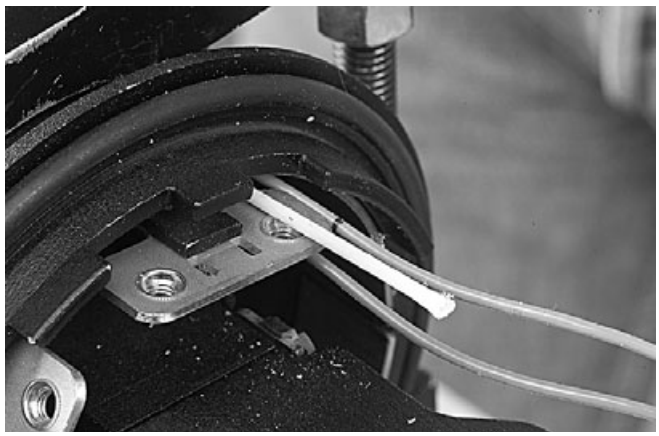
3.2.5 Cut the strength member at the mark.

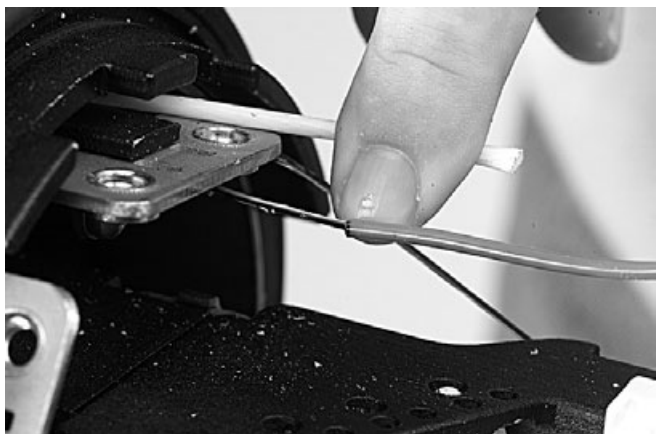
3.2.6 Already make a groove in the tubes at the mark.
Prepare the loose tubes to strip afterwards inside the closure.
Important: place the tubing over the cable before pushing the cable into the closure, check the arrow on the tubing, pointing towards the base.

3.2.7 If cable is smaller than 5 mm, install built-up tubing 15 mm before the end of the outer jacket. Before installing, clean and abrade the cable.



3.2.8 Push the loose tubes through the round port.





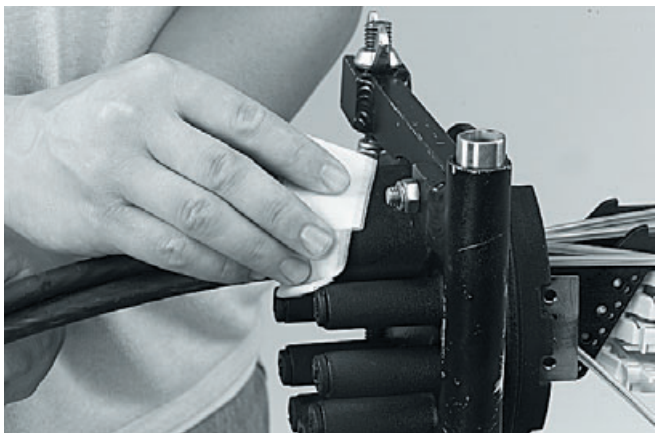
3.2.9 Strip the loose tubes that are already prepared to be stripped.

3.2.10 Select a transportation tube that fits over the loose tube. Slip the transportation tube over the fibers and the loose tube. Transportation tube should overlap the loose tube for 20 mm.

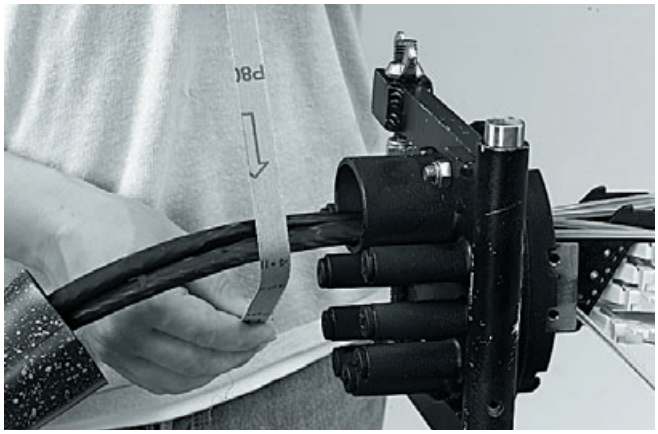
3.2.11 Push back the cable and install the strength member in the strength member device.
Note: in case there is no strength member, see point 4.2.8.

4 Heathshrink installation

4.1 Oval port installation

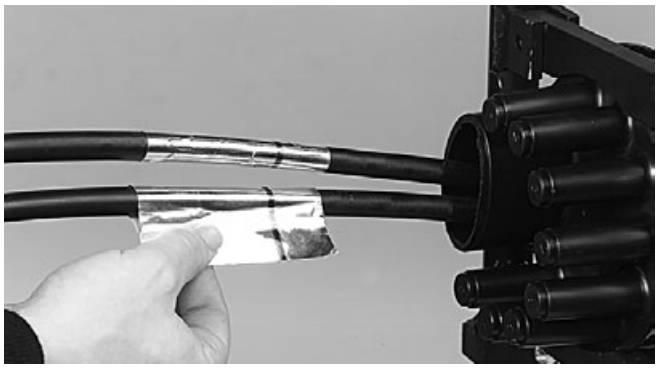


4.1.2 Clean the oval port and cables.

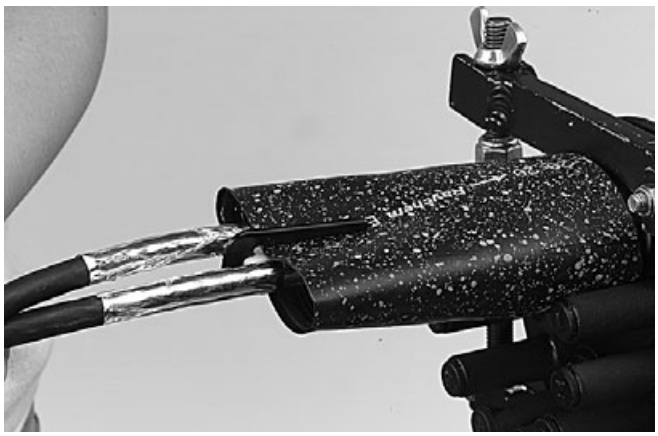


4.1.3 Abrade the oval port and cables.

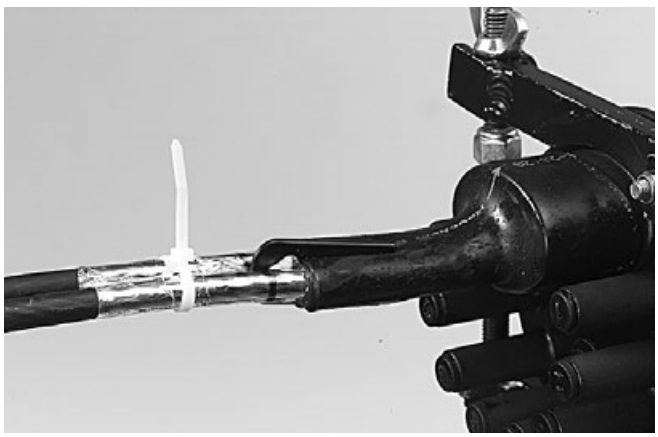
4.1.1 Remove the packing bag out of the seal, push the seal upwards to base and mark the cable. Make sure the non-coated zone butts against the base.



4.1.4 Match the blue line of the aluminum protection foil with the marks on the cables. Wrap aluminum cable protection foil around the cable.



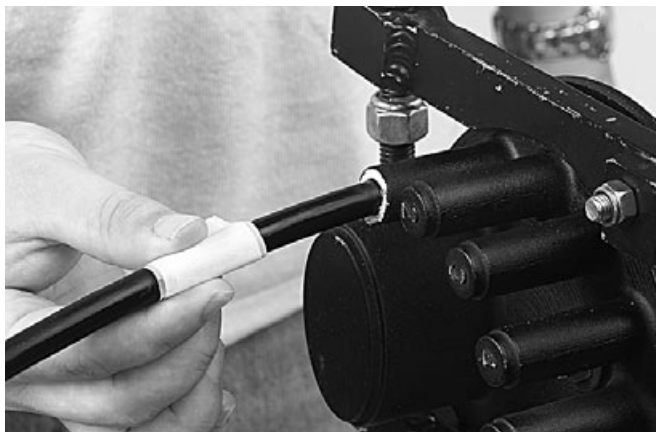
4.1.5 Push the seal against the base and place the clip.



4.1.6 Hold the cable in position. Shrink till the green painting dots become black and the hotmelt is visible on the bottom. Postheat the clip area on both sides till the adhesive shows a proper flow on the clip between the two cables. Hold the cables together with a tie-wrap.
Note: do not move cable and closure until the sleeve is cool to the touch.

4.2 Drop port installation

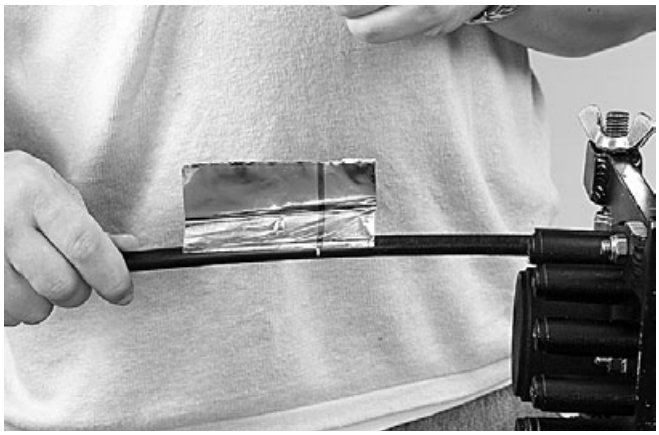
Cable > than 5 mm



4.2.1 Clean cable and round port.

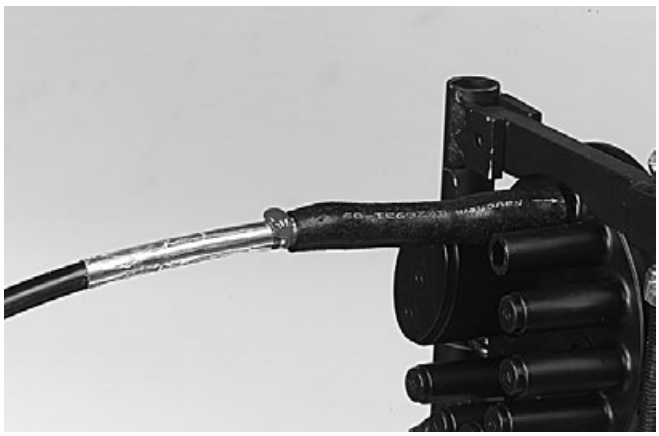
4.2.2 Abrade cable and round port.

4.2.3 Remove the packing bag out of the seal, push the seal upwards to base and mark the cable.



4.2.4 Match the blue line of the aluminum protection foil with the mark on the cable. Wrap aluminum cable protection foil around the cable.

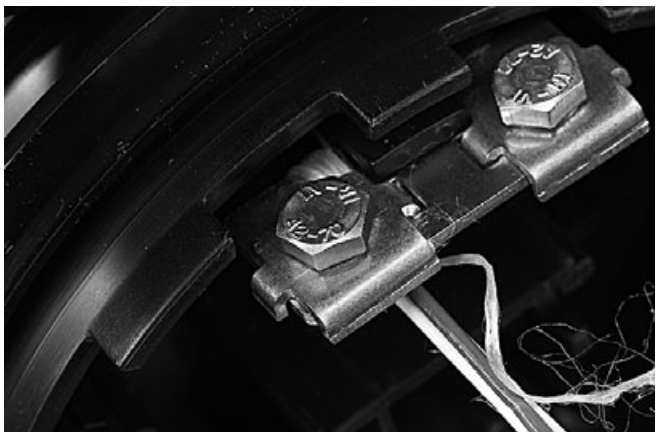
4.2.5 Push back the seal.



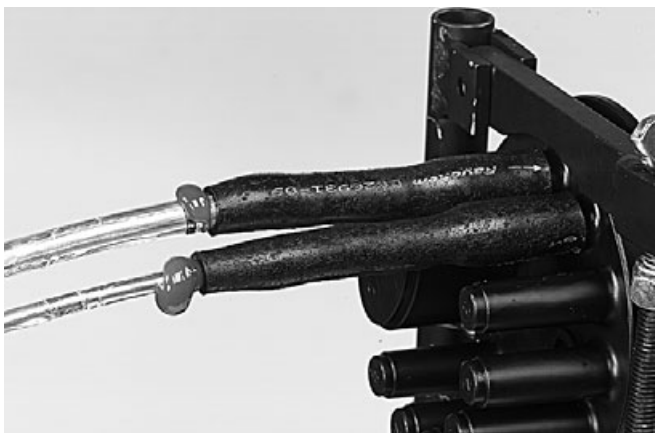
4.2.6 Hold the cable in position. Shrink till the green painting dots become black and the hotmelt is visible on the bottom. Do not move cable and closure until the adhesive is cooled down.

Cable ≤ than 5 mm

4.2.7 In case the cable has no strength member, push the built-up tubing 10 mm inside the round port. Clean and abrade the built-up tubing.



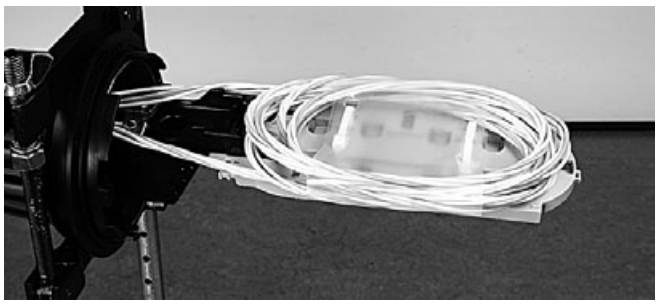
4.2.8 Wrap the Kevlar around and install the plate over the Kevlar.



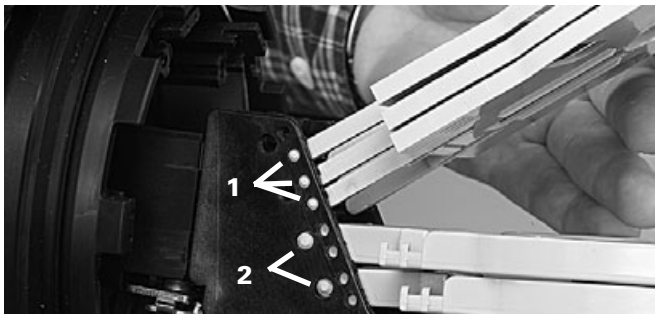
4.2.9 Install the seal.

5 Organization of fibers

5.1 General

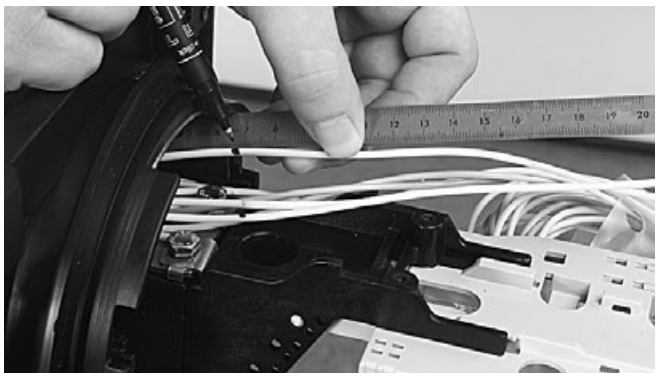


5.1.1 Make some loops with the uncut loose tubes and place these in the basket behind the trays, or in the bag.

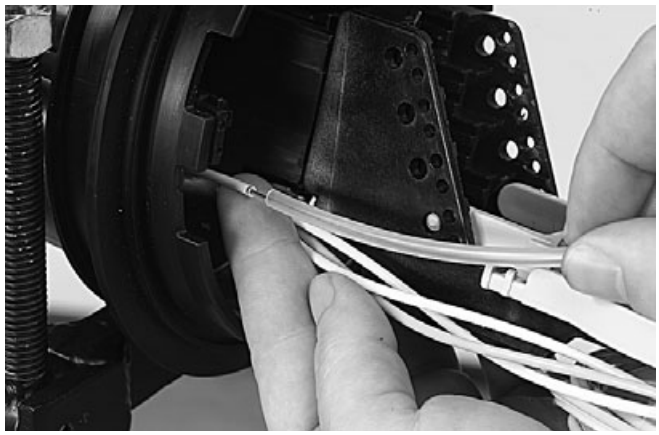


5.1.2 Install the trays. AS-trays (1). All the other trays (2).

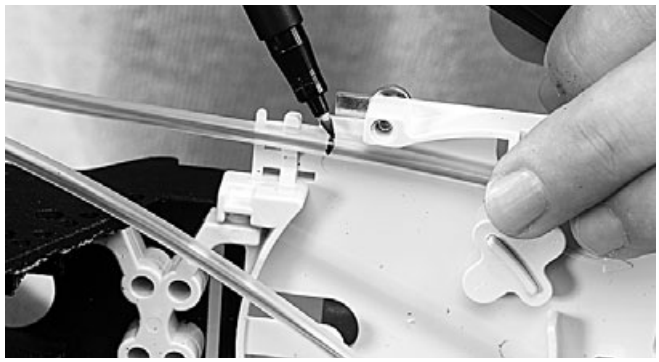
5.2 ACC- and S-trays

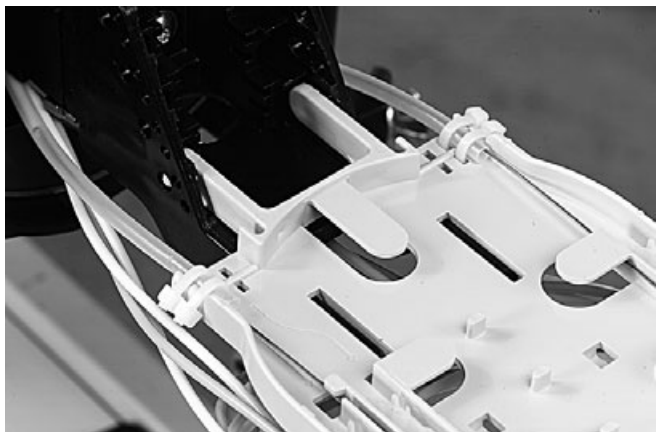


5.2.1 Select a tube and mark at 70 mm from the bottom of the base, strip the tube from this point.



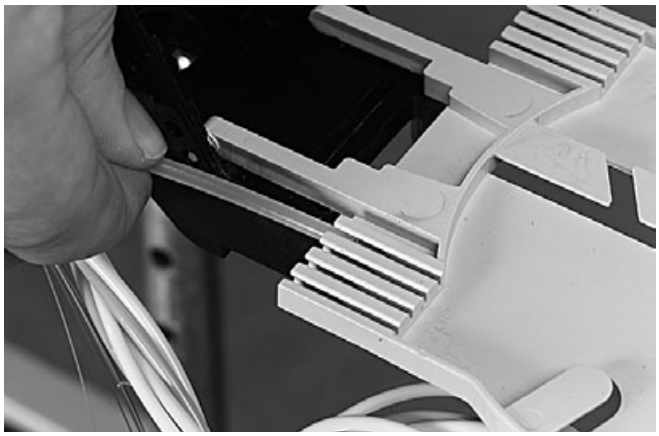
5.2.2 Select a transportation tube that fits over the loose tube. Slip the transportation tube over the fibers and the loose tube. Transportation tube should overlap the loose tube for more than 20 mm.





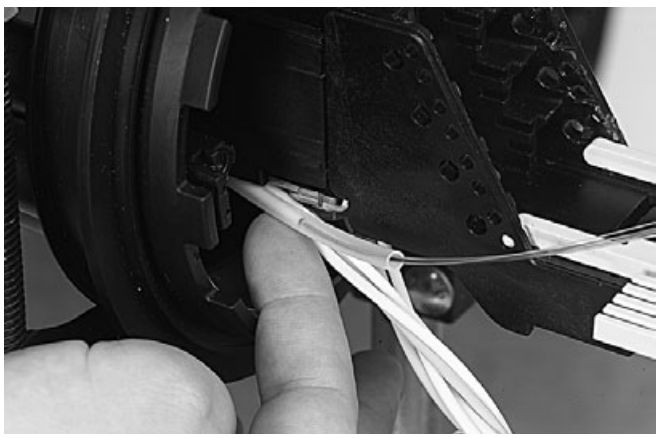
5.2.3 Route the transportation tubes to the appropriate tray. Position the transportation tubes on the bottom of the tray and align the tubes along the tray. Place a mark on each tube on the tray side at 15 mm from the tray edge.

5.3 AS-tray



5.3.1 Insert the FOPT in the slot of the tray, check the difference for the small and the big one.

5.3.2 Mark the FOPT 20 mm measured from the end of the loose tube.

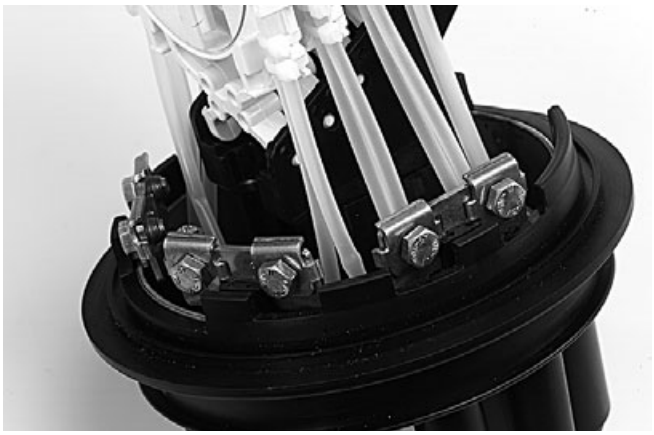


5.3.2 Slide the FOPT CT over the loose tube.

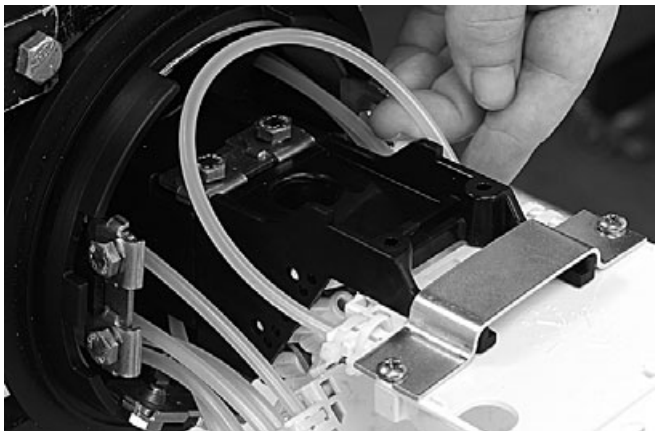
5.3.4 Slide the FOPT in the FOPT CT.

5.3.5 Install the FOPT in the tray. The FOPT CT should overlap both tubes around 30 mm.

6 Transportation tubes routing



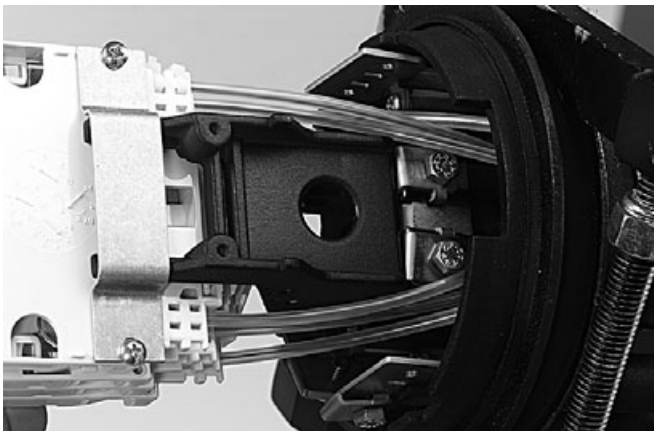
6.1 Route the transportation tubing direct to the appropriate tray.
Note: not applicable for port 5 and 6 (see 6.3).

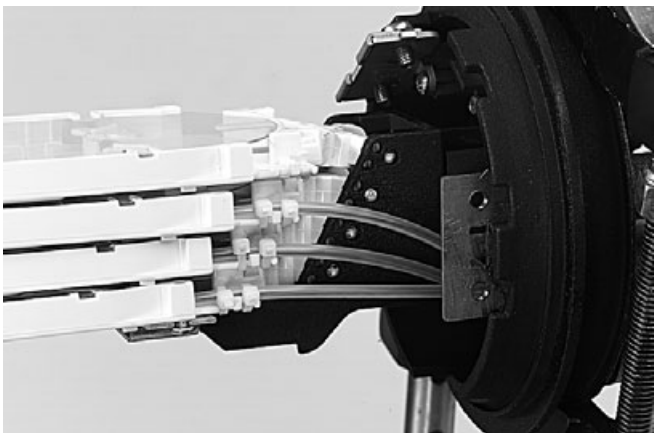


6.2 Inter tray jumping. Route behind the tower to the appropriate tray

Note: provide enough slack on transportation tubing such that no severe bending or kinking of transportation tubing may occur during hinging.

6.3 Cross-over for port 5 and 6, this for the top tray only.

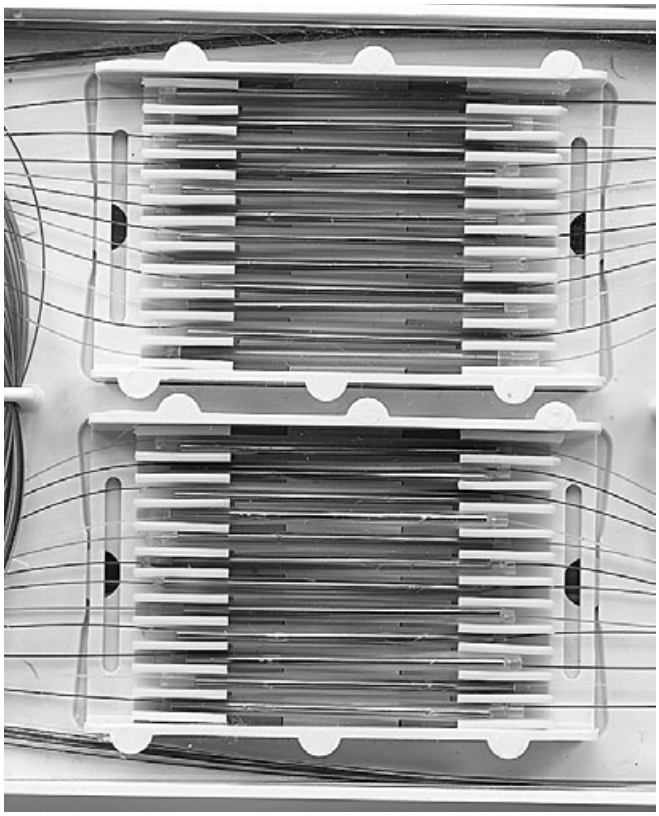




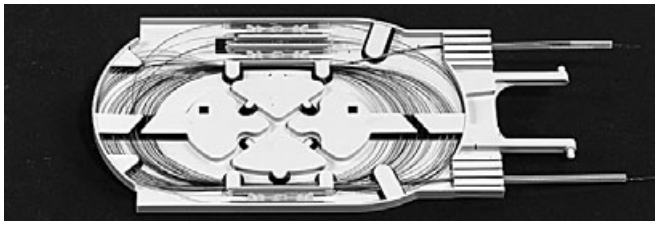
6.4 Transportation tubes coming from the looped cable going to the appropriate tray.

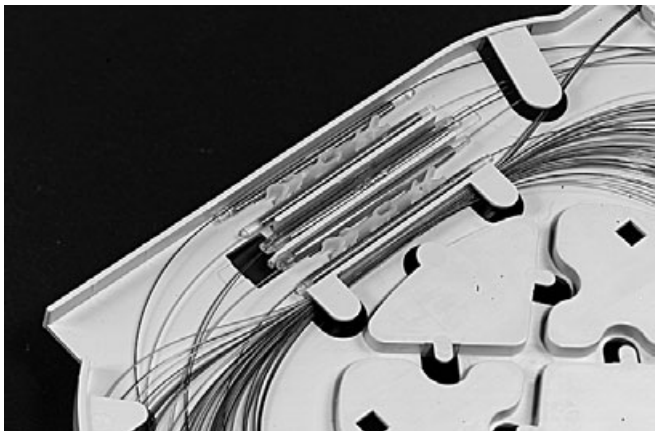
7 Fiber Routing

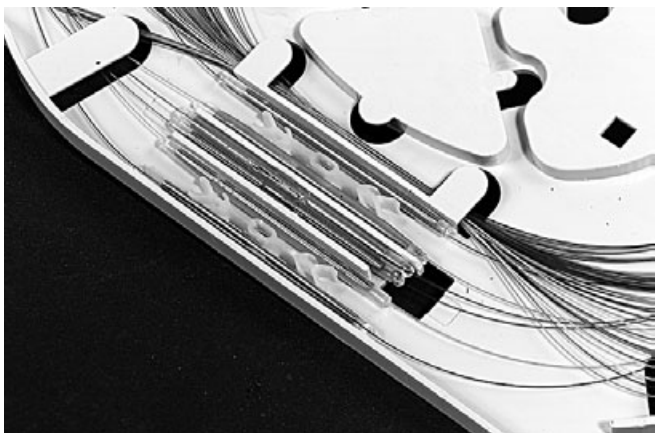
7.1 ACC-A-TRAY



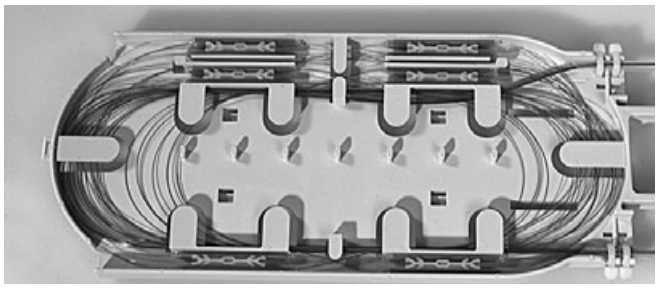
7.2 AS-TRAY



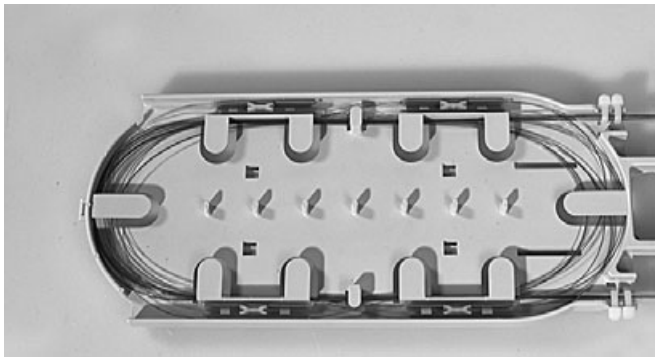


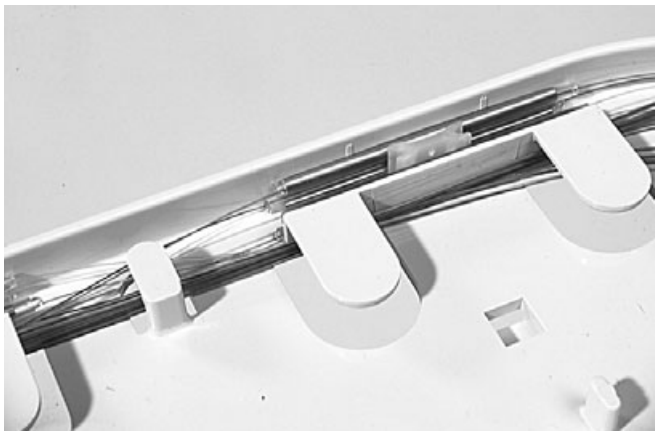


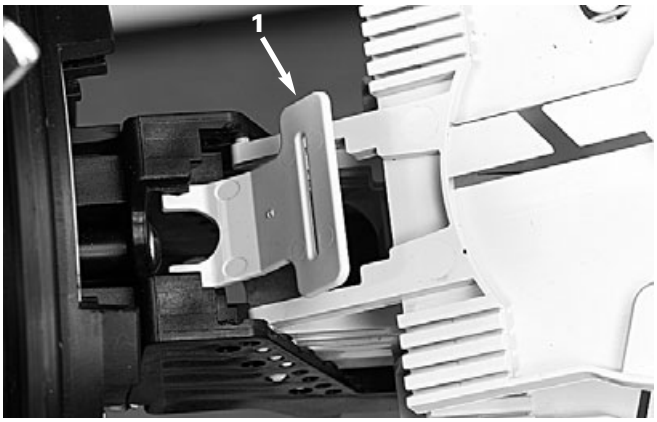
7.3 A-TRAY-S24

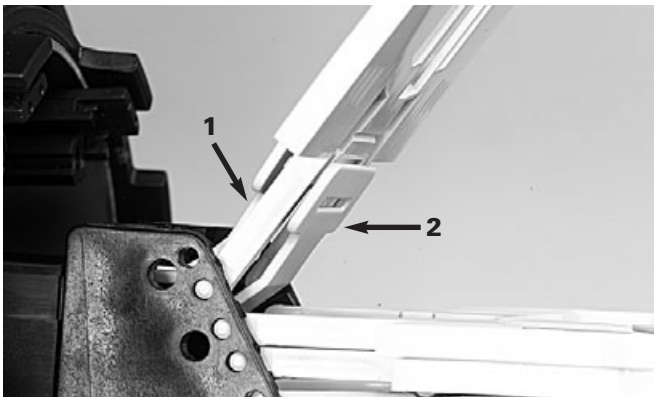


7.4 A-TRAY-S16









7.5.2 In case of AS-tray: always install one wedge in the top position (1). Install a second wedge (2) on top of the appropriate tray.

7.5 Tray wedge

7.5.1 Use tray wedge to keep the tray in upward position.

8 Closing the closure

8.1 Bundle the trays together with the Velcro. Place the silica gel between Velcro and trays.

8.2 Ensure seal areas and sealing ring are clean and sealing ring is in place at the base. Place the dome over the trays onto the base, check the arrows on base and dome. Put the clamp around the base/dome interface. Close the clamp.

Tyco Electronics Raychem NV
Telecom Outside Plant
Diestsesteenweg 692
B-3010 Kessel-Lo, Belgium
Tel.: 32-16-351 011
Fax: 32-16-351 697
www.tycoelectronics.com
www.telecomosp.com