Fiber Optic Splice Closure

User Manual

VSC-10V7

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1. General

VSC-10V7 Fiber Optic Splice Closure is suitable for protecting fiber cable splices in straight and branching application. It can be placed in aerial, wall-mounting, handhole-mounting and duce-mounting application.

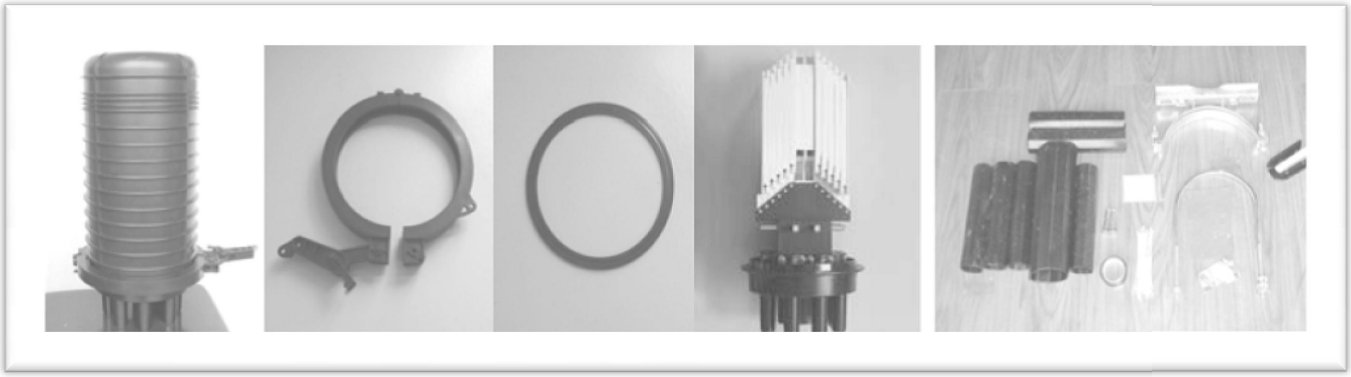
The closure is suitable for the application up to 144 fibers, specially designed to FTTx application.

2. Specification

Outside dimension (mm) Weight (kg)	465×φ260 5.15—5.5	Max. capacity (bunchy) Sealing method	240 Heat shrink
Number of ports	7	Max. capacity of the tray	24
Diameter of the cable (mm)	Ø8~Ø 17.5 (φ23)		
Max. no. of trays	10		

3. Structure and configuration

3.1 Pictures of VSC-10V7 and its main Components



3.2 Configuration

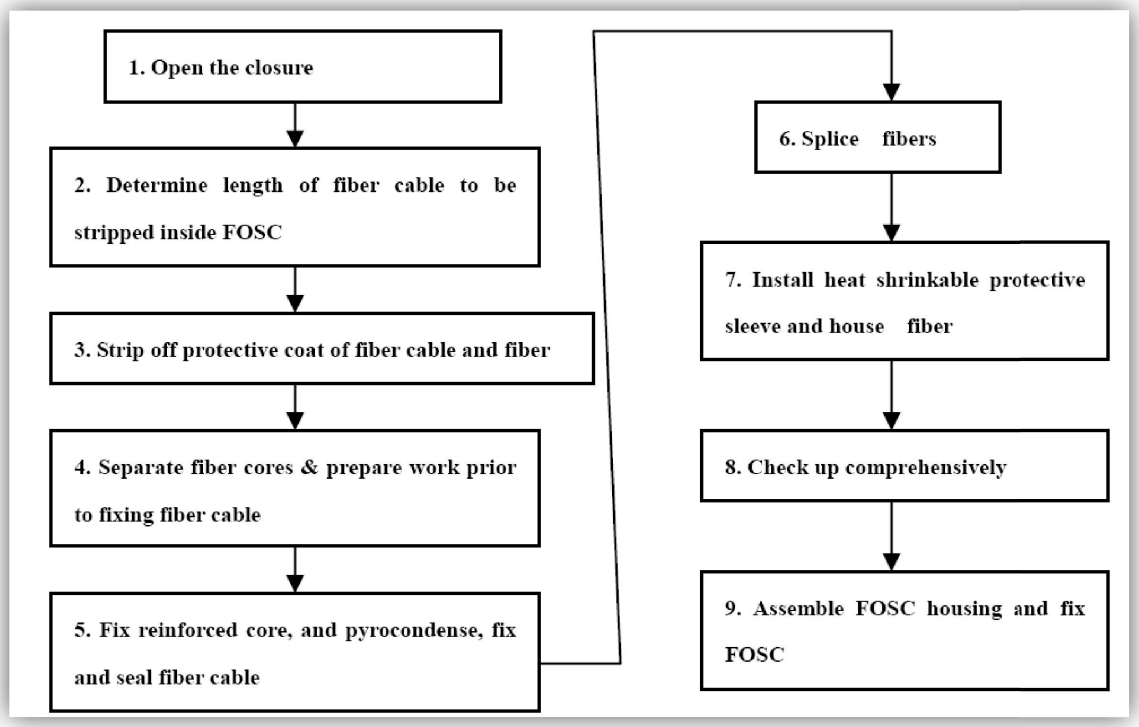
3.2.1 Main Components

Serial	Name	Quantity	Remark
1	Cover	1	H×D (mm): 465×ϕ260
2	Tray	As per requirement (Max. 10)	Fixing heat shrinkable protective sleeve and holding fibers
3	Base	1	Fixing internal and external structure
4	Plastic hoop	1	Fixing between FOSC cover and base
5	Sealing fitting	1	Sealing between FOSC cover and base
6	Fixing sheet	1	For winding loose tube
7	Earthing deriving device	1	Deriving metal parts of fiber cables in FOSC for earthing connection

3.2.2 Accessories

Serial No.	Name	Quantity	Usage
1	Heat Shrinkable Protective Sleeve	Configuration as per capacity	Protecting fiber splice
2	Nylon Tie	Configuration as per capacity	Fixing fiber with protective coat
3	Metal hoop	1 set	For wall mounting and pole hugging
4	Numbering Paper	1 pcs	Numbering fibers
5	Insulation Tape	1 roll	Enlarge diameter of fiber cable
6	Buffer Tube	1 pcs	For buffer management
7	Heat Shrinkable Fixing Sleeve (ϕ30×150)	Max. 6 pcs (optional)	Fixing and sealing single fiber cable
8	Heat Shrinkable Fixing Sleeve (ϕ75×σ150)	1 pcs (optional)	Fixing and sealing mass fiber cable
9	Emery Cloth	1 pcs	Cleaning fiber cable
10	Alumimum Paper	1 pcs	Protecting fiber
11	Branch-off clip	1 pcs	Branching fiber cable
12	Pressure testing valve	1 set (optional)	For sealing and pressure testing

4. Installation Flow Chat



5. The process of installing FOSC

5.1 Open the closure

5.1.1. Prior to installing , check the fiber cable type and its structure, different type of cable can't be spliced together.

5.1.2. Cleaning the locale and determine where to install the FOSC and place fiber cable required

5.1.3. Check the main components and accessories whether have been well prepared inside the package.

5.1.4. Open the closure (Figure 1.)

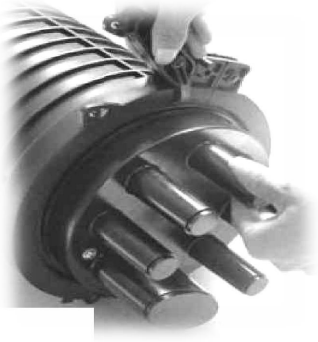


Figure 1

① Demounting hoop fixing bolt and pull hoop locking system out, then proceed in demounting the hoop

② Pull the FOSC cover upwards out, installation could begin

Remark:

①. If the weather condition is not good enough, then a tent must be pitched for waterproof and dustproof

②. Be careful while opening due to its proper sealing system

5.2. Determine length of fiber cable to be stripped inside FOSC

5.2.1. The length of fiber cable to be stripped: 180cm.

Remark:

①. Reserve enough of fiber cable to be spliced

②. Stipping length also could be decided by customers according to the installation requirement

5.3. Stip off protective coat of fiber cable and fiber

5.3.1 Stip off protective coat of fiber cable from the temp.locating mark with the cutter and the stripper (Figure 2.).

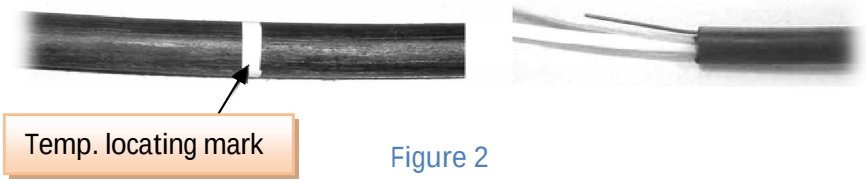


Figure 2

Remark: if it is difficult to pull all the protective coat of fiber cable at one time, strip if off section by section to avoid fiber breakage.

5.4. Separate fiber cores and prepare work prior to fixing fiber cable.

5.4.1 Wind 2 layers of insulation tape on protective coat of fiber core for protection. Meanwhile, get rid of the stuffing to separate fiber core and clean them.

5.4.2. Depending on fiber cable stripped, the following two cases are available. ① All fibers are to be branched after being spliced completely. ② Some of fibers are for straight-through after being winded, while the others are for branch splicing.

5.4.3.Mass entry/exit port is required if some fibers are for straight-through

5.4.4. With saw or other proper tool, cut off the cover of the corresponding entry/exit port with its max. length 5mm, which was properly selected according to the installation requirement (Figure 3).

5.4.5. Reserve reinforced core in 50mm length and cut off the unnecessary ones.

Remark: entry/exit ports are to be selected accurately to make it easy for splicing and sealing.

5.5 Fixed reinforced core, and pycrocondense, fix and seal fiber cable

5.5.1 Insert fiber cable into the corresponding ports.

5.5.2. Insert the core into the hole of the fxing seat, and tight nut with the specifical wrench (Figure 4)

5.5.3. Press the fiber cable through pressboard, while diameter is small, enlarge with insulation tape/

5.5.4. Scratch fiber cable with embry paper

5.5.5. Wind the fiber cable with alumimum paper with length of 10cm (among 10cm, 6cm will be covered by heat shrinkable fixing sleeve) (Figure 5)

5.5.6. Heat heat shrinkable fixing sleeve with fire sprayer to make it hugging entry/exit port and fiber cable to reach complete sealing. (Figure 6)

Figure 3

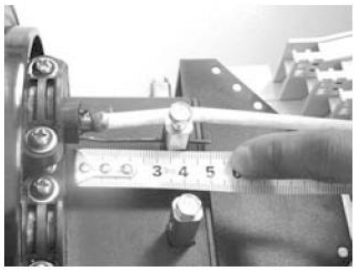


Figure 4

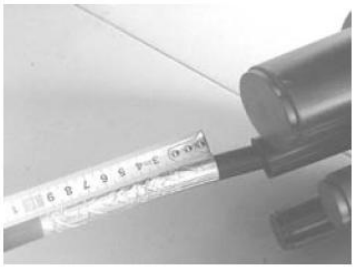


Figure 5

Figure 6

5.6. Step Six - Splice fibers

5.6.1. Follow user manual of fusion splicer to splice fiber.

Remark: pay attention to the twist and bend of fiber

5.7. Step Seven -Install heat shrinkable protective sleeve and house fibers.

5.7.1 . When having completed splicing the fibers, the first fiber ring should be housed on the farthest side of FOST, the remaining fiber optic should be winded then put it into FOST together with heat shrinkable protective sleeve.

5.7.2 see Figure 6

Remark: pay attention to the twist and bend of fiber

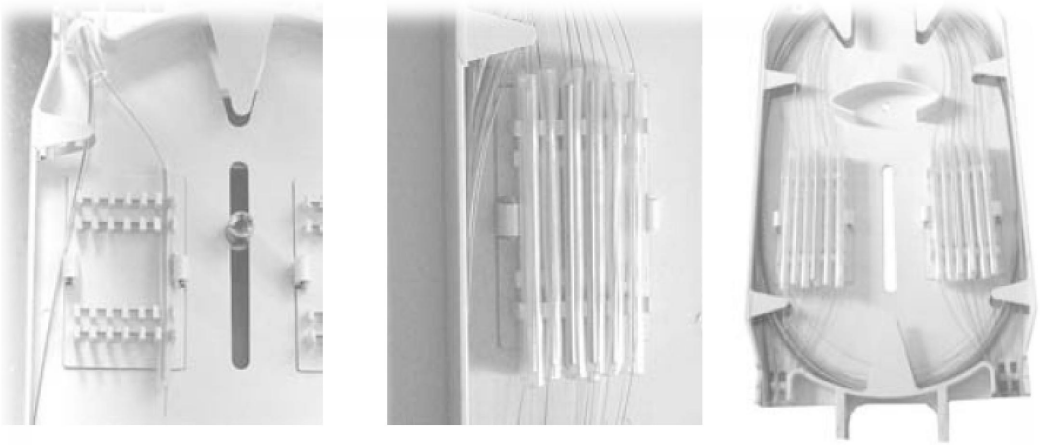


Figure 7

5.8. Check up comprehensively prior to assemblying FOSC

5.9. Step Nine – Assemble FOSC housing and fix FOSC

5.9.1. Put the sealing fitting properly (Figure 8)

5.9.2. Put FOSC cover on base directly.

5.9.3. Install plastic hoop between FOSC cover and base, tighten hoop locking system, which is to be fixed by hoop fixing bolt then. (Figure 9)

Figure 8 and 9