

## **GP03J Fiber Optic Splice Closure**

### **Description:**

- Suitable for aerial, cable duct, direct buried, pedestal and well applications
- Easy installation with no special tool required
- Re-enterable with no re-entry kit needed
- High compressive strength
- Chemical resistant
- Suitable for ribbon and non-ribbon fibers
- Reliable gasket sealing



### **Product Name:**

GP03J Fiber optic splice closure

### **Product Standard:**

Specification of Fiber Optic Outdoor Splice Closure No. YD/T814.1-2004 by MII  
Specific Rules for Compulsory Certification of Distribution Equipment (VD.3)

### **Application:**

Widely used in aerial, duct places outdoor and can be directly buried underground.

### **Features:**

- Having good mechanical performance, strong bad weather resistance capacity as well as electric features by use of high quality polypropylene together with thermal aging additive.
- made of material with good capability of outdoor environment resistance and high durability
- Having reliable cable fixing and grounding facilities.
- Using self-adhesive isolative tape and glue belt to seal.
- To use rotating method to connect fiber organizer cassette result in easy installation.
- Mechanical design suitable for installing, fiber splicing storage and cable connection
- Compact and tight.

### **Main Technical Parameters**

- Applicable environment temperatures:  $-10^{\circ}\text{C}\sim+70^{\circ}\text{C}$
- Air pressure: 70~106Kpa
- Pull-out strength  $\geq 1000\text{N}$ , compressive force to shell  $\geq 2000\text{N}$ , impact: 16N.m
- Bending force to fiber cable:  $150\text{N} (\pm 45^{\circ})$ , torsion force to fiber cable:  $30\text{N.m} (\pm 90^{\circ})$
- Tightness: no pressure drop within the enclosure pressurized to 60Kpa at  $70^{\circ}\text{C}$  for 100 hours

- Insulation resistance  $\geq 2 \times 10^4 M\Omega$ , resistance to 1.5KV/min without break down
- Life expectancy: 25 years

## The capacity of Closure

Product Mode	The Nos. of fiber organizer cassettes	Capacity for Single core cable(cores)	Capacity for ribbon cable (cores/ ribbon nos.)
GP03J-12	1	12	24/2
GP03J-24	2	24	48/4
GP03J-36	3	36	72/6
GP03J-48	4	48	96/8
GP03J-60	5	60	120/10
GP03J-72	6	72	144/12
GP03J-96	4	96	288/12
GP03J-120	5	120	288/12
GP03J-144	6	144	288/12

## Remarks:

the ribbon fiber cable has 12 cores each ribbon. If the user use 8 cores, 6 cores and 4 cores ribbon cable, the nos. of ribbon cables can be added on the condition that installation can be managed easily.

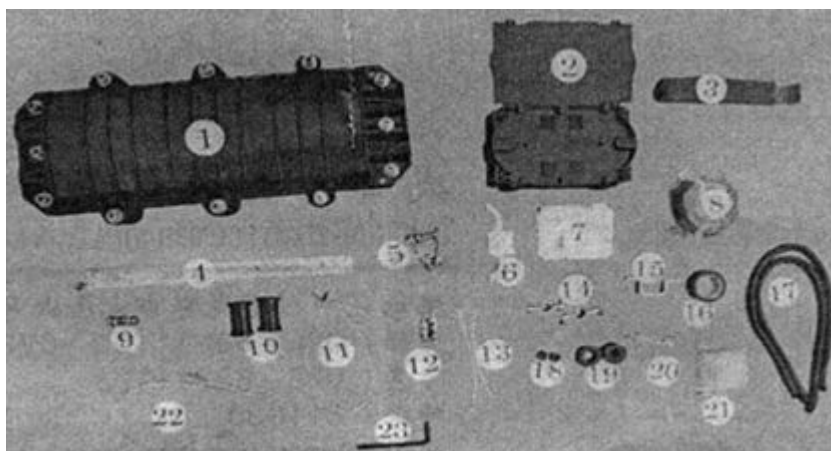
## The dimensions of the closures

GP03J-12/24/36/48/60/72 L×W×H=436×190×114

GP03J-96 L×W×H=440×190×80

## Components of closure:

- closure body
- fiber organizer cassette
- scuff cloth
- supporting frame
- aerial buckle
- cable fixing frame
- cleaning tissue
- self-adhibiting insulative tape
- grounding facility
- hole plug
- shield continuity wire
- fixing pole for strengthened core
- naked fiber protection tube
- clamping board for optic fiber cable
- fixing socket bracket
- insulative tape
- self-adhibiting insulative glue belt
- insulative cushion
- optic fiber cable supporting ring
- tie-wrap
- fiber melting protection tube
- Fiber-optic cable steel core connection string
- six angles spanner.



## Installation procedures:

### 1. Cable connection endings processing:

#### 1.1 removing protection sheath of cable



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1.2 removing all the outer parts of cable, only leave 40mm fiber cores (fiber should not be damaged).

1.3 removing crease and filling compounds of fiber and strengthened cores.

1.4 in order to install shield continuity wire, use cutter to cut 25mm sheath circumferentially to leave shield layer visible.

1.5 Using scuff cloth to abrade outer surface 80mm length.

### **2. Fixing of Fibers and strengthened core**

2.1 Put fiber bundle within the fiber organizer cassette into naked fibers protection tube. Move tube to the sheath part of fiber-optic cable and use insulative tape to fix it.

2.2 According to the out diameter of fiber-optic, choose 2 optic fiber cable supporting ring onto fiber optic cable and put clamping board onto cable fixing frame.

2.3 Fix strengthened core on fixing pole temporarily and put cable supporting ring into the slot at both ends of cable paths inside the closure. The end of fiber optic cable is pressed inside clamping board temporarily to decide the axis position of fiber optic cable. Mark on the fiber optic cable at the inside part between 2 opposite supporting rings (the distance between 2 marks should be 36mm). Take off fiber optic cable and use self-adhibiting insulative tape to wrap the marked part till the diameter is 28mm, which will be the sealing part between fiber optic cable and closure.

2.4 Fix strengthened core into the strengthened core fixing pole and fix the outer sheath end of cable into clamping board on the cable fixing frame.

2.5 If the out diameter of cable is too small and the interstice between cable and cable clamping board is too big, use some insulative tape to wrap on the outer surface of cable at clamping board part (width is 18 to 20mm).

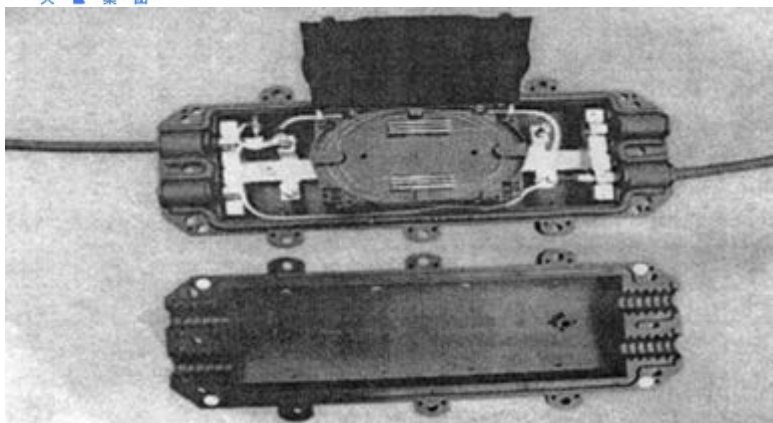
### **3. The melting connection of fibers inside the fiber organizer cassette and the storage of extra length fibers**

Following procedures should be managed by professional technicians with professional equipments.

3.1 absolutely remove the dust & burr on the fiber organizer cassette. After putting-together fiber organizer cassette, put the fiber organizer cassette at the bottom on the strap frame.

3.2 use tie-wrap to fix fiber protection tube at the entry part of fiber organizer cassette.

3.3 According to prescribed operation procedures & requirements to do melting, testing, melting protection, fixing in the slot and marking. And put extra fibers inside the fiber organizer cassette regularly.



3.4 After finishing the first fiber organizer cassette, turn to the second fiber organizer cassette to manage melting procedures etc. Till finishing the last fiber organizer cassette, close the cassettes cover. Fix each fiber organizer cassette with bolt.

3.5 According to the requirement of customer, with provided connecting wire for strengthened core and shield continuity wire for fiber optic cable, the metal parts inside the fiber optic cables could be connected, grounded or disconnected.

## 4. Sealing of closure

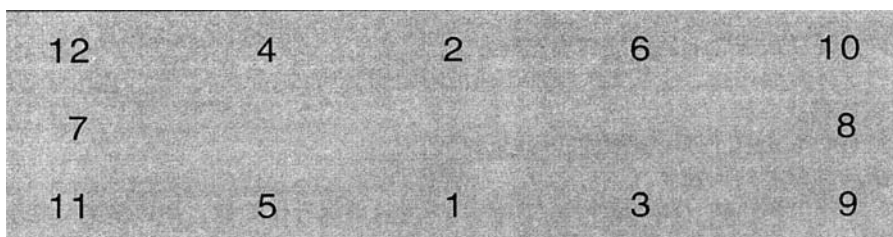
4.1 put all the components inside the closure, which are installed on the frame and fix with bolt. Put self-adhibiting tape wrapped fiber-optic section and optic fiber cable supporting ring into the semicircle shape slot in the fiber optic cable path.

4.2 Put self-adhibiting insulative glue belt ( $\varnothing=8$ ) in the both side parts of closure body and the sealing slots on the both ends and squeeze tightly at the connection part.

4.3 If only one fiber optic cable enters into each end of closure body, for the other cable path, which is not used right now, use self-adhibiting insulative glue belt (width=35mm, thickness=2mm) to wrap at the part of middle slot of hole-sealing plug till the diameter is 27mm.

4.4 close the cover of closure body and press it heavily by hands.

4.5 Put 12 connection bolts with flat gasket and screw the bolts following under-mentioned sequence repeatedly till the closure body and cover meets tightly.



4.6 If the closure will be hung, then fix aerial buckle at bolts no. 9 and 11 or 10 and 12.

## 5. Re-opening of closure and use it repeatedly

5.1. Unload aerial buckle and remove 12 connection bolts.



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5.2. screw 4 connection bolts into the closure opening holes at the four angle parts on the closure cover and separate the closure body and cover gradually.

5.3. Clear all the previous sealing leftover.

5.4 according to the customer requirement, repair, change, increase or decrease the number of fibers with reference to above procedures.

5.5 When assemble the closure again, to ensure the sealing effect, all the sealing accessories should be changed.

### **Storage**

The closures should be put under good ventilation condition and on the frames, which are 20mm away from the ground and wall of warehouse; temperature range: -15 to 75 degree; relative humidity should not be more than 85% (30 celsius degree); the acid & alkali figures and the content of other harmful gases should meet environment protection requirement.