Dome Fiber Optic Splice Closure

GPJM-R144

Instruction Manual

1、 Description

Fiber optic splice closure is an equipment that used for optical fiber cable splicing, joint and protection. It is water proof and dust proof and suitable for outdoor aerial hanged, pole mounted, wall mounted, duct, buried application. It can be opened after sealing and can be reused without changing sealing material.

2、 Application

GPJM-R144 dome type fiber optic splice closure is design and produced as per YD/T 814.1-2004 industry standard. It is suitable for fiber optical cable direct and branch splicing, connection protection.

3、 Technical characteristics

3.1 Main electrical technical parameters

High voltage protective earthing device:

Insulation resistance: ≥2×10^4MΩ/500V (DC)

Voltage resistance: ≥15000V (DC) /1min, no breakdown, no arc.

3.2 Main mechanical parameters

Stretching: The closure can stand more than 600N axial tension

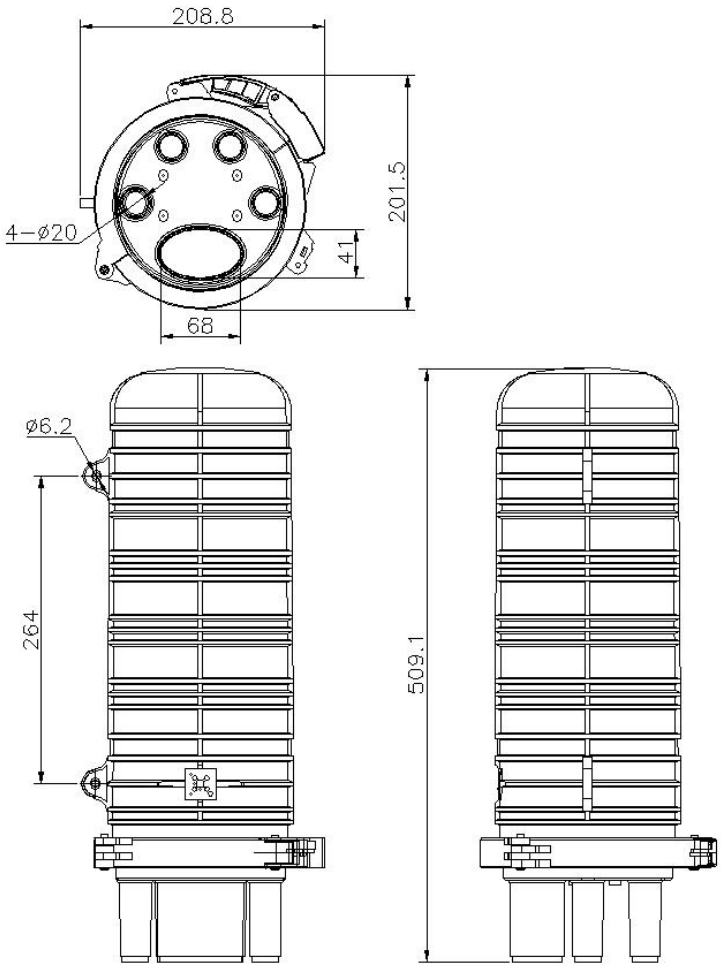
Pressure: The closure can stand 1500N/100mm pressure

Impact: The closure can stand impact 16N·m, impact 3 times

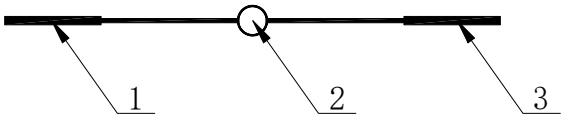
Bending: The closure and cable junction can stand bending tension 150N, bending angle ±45°for 10 cycles.

3.3 Basic structure and size

GPJM-R144 dome type fiber optic splice closure has 1 oval port and 4 round cable port. (See below picture)

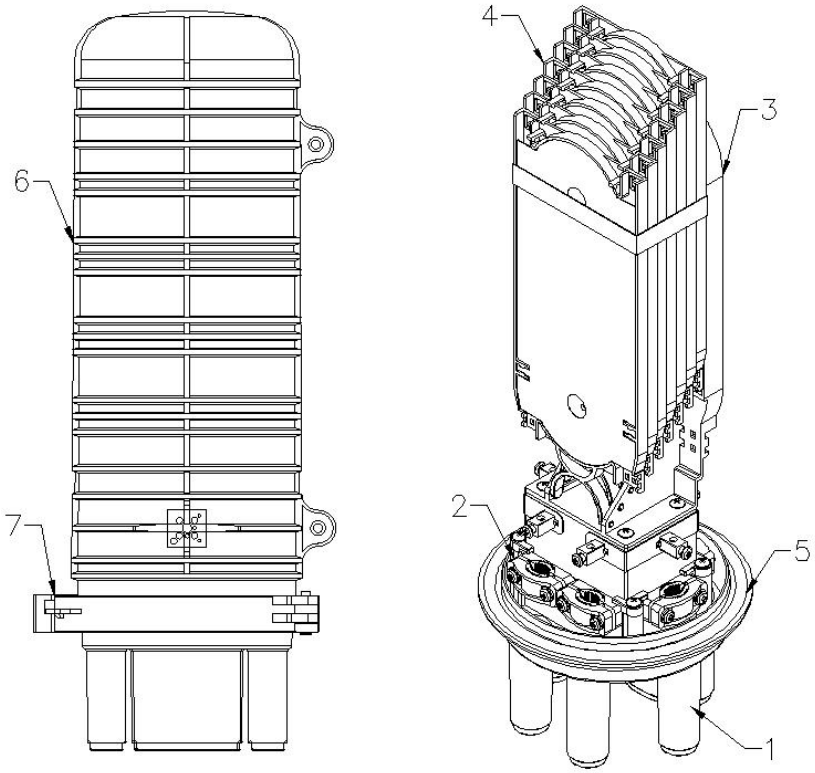


3.4 Working principle



1-- fiber optic cable 2-- fiber junction 3-- fiber optic cable

3.5 Structure composition



1-- bottom base 2-- cable fixing part 3-- cable storage tray 4-- fiber splice tray
5-- sealing gasket 6-- closure housing 7-- hoop

3.6 Features

Aerial hanged, pole mounted, duct, direct buried, pipe well mounted

Made of high quality anti-aging engineering plastics

The box seal and optical fiber inlet and outlet seals are fast and simple operation.

Good design for optic fiber arrangement, make sure the fiber max.bending radius, enough fiber storage space.

Fiber optic spice tray has enough fiber storage space, overturn angle more than 90°, easy for maintenance

Long using life, about 25 years

IP standard: IP68

3.7 Using environment

Working temperature: -40℃～＋65℃；

Storage and transportation temperature: －25℃～＋65℃

Relative humidity：≤85%（＋30℃）

Atmospheric pressure： 70～106kPa

4、Installation and adjustment

4.1 Open inspection

Open the packaging, check whether the products and accessories are complete, check whether the products are in good condition.

4.2 Tool

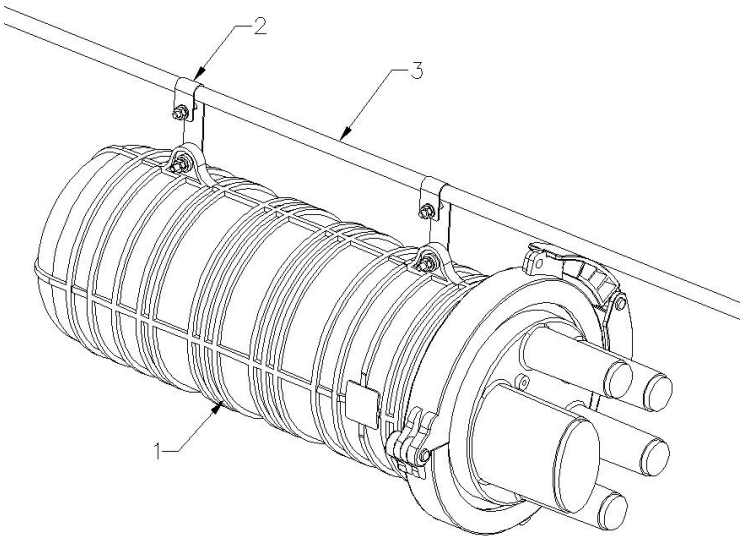
Please prepare the screwdriver, spanner, hacksaw, air gun etc.

4.3 Installation

GPJM-R144 can be aerial hanged or pole mounted application. Aerial hanged mounted and pole mounted accessories are optional.

4.3.1 Aerial hanged application

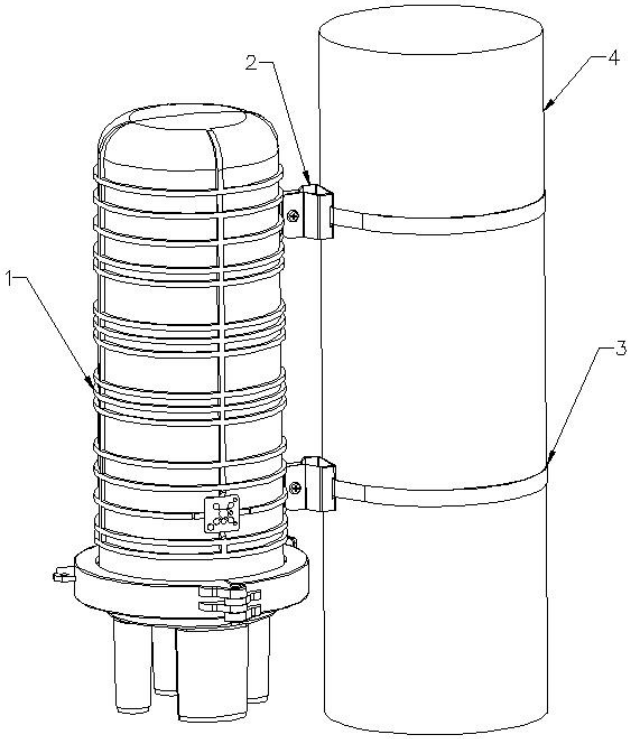
Fixed the one side of hook on the closure housing by screws, then put the other side of hook to the steel wire and fixed by screws. See below picture.



1-- closure 2-- Aerial hanged accessory 3— steel wire

4.3.2 Pole mounted application

Fix the fixing part on the closure housing by screws, then use stainless tape on the pole. See below picture.



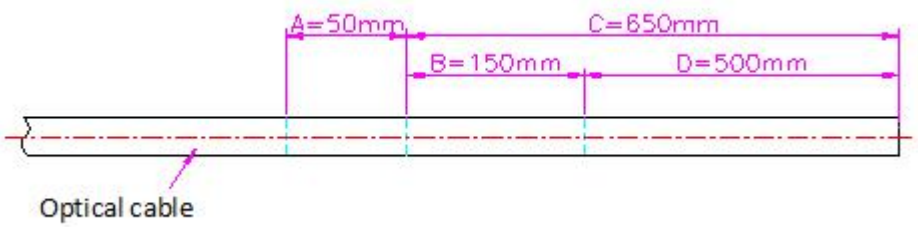
1-- Splice closure 2-- Fixing part 3— Stainless tape 4— Pole

5、 Use and operation

5.1 Please read the instruction manual.

5.2 Open the hoop, then open the closure.

5.3 Make sure the optical fiber cable length in closure and break out length are enough. See below picture.

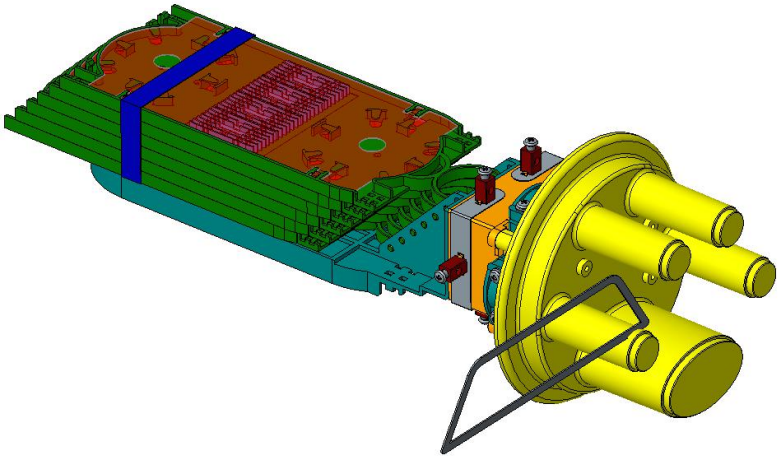


A— cable fixing length B-- Cable with jacket length inside closure

C— Cable mini. length inside closure D— Break out cable length

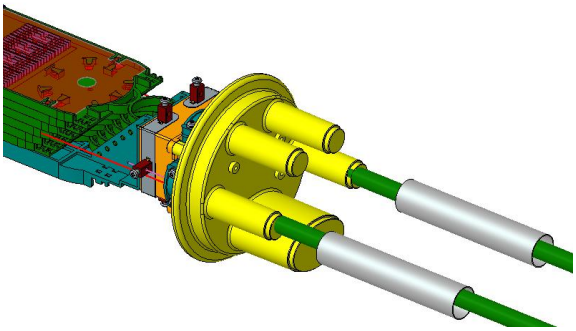
5.4 Strip out cable outside jacket by pipe cutter and longitudinal stripper. The length is as per above 5.3 instruction or as per using condition.

5.5 Cut off the cable port by hacksaw, then open the cable port. (See below picture)

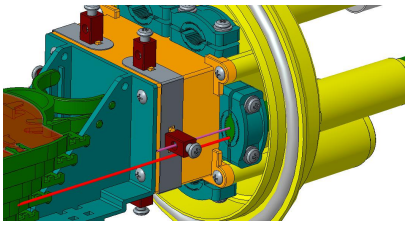


5.6 Optical cable installation

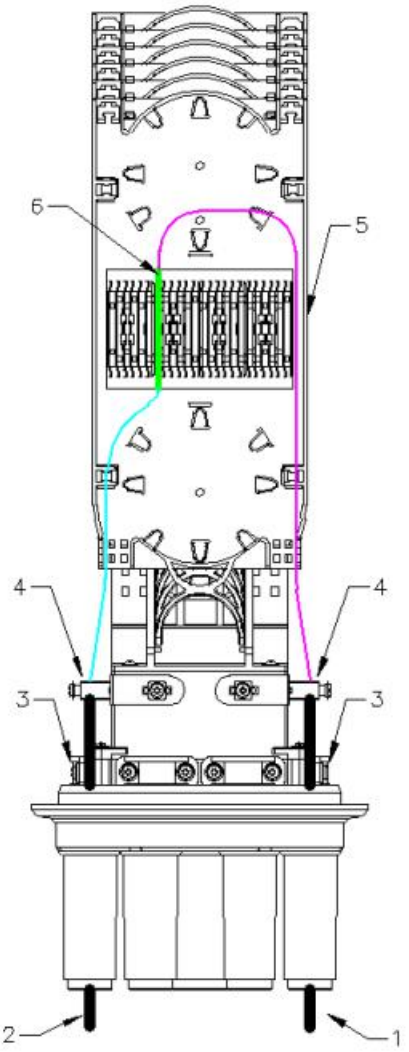
5.6.1 Put the stripped optical cable get through the heat shrinkable tube, closure cable port as per below picture.



5.6.2 Fix the cable strengthen core by cable fixing column. (See below picture)



5.6.3 Put the stripped optical fiber into fiber splice tray, do splicing and storage. (See below picture)



1. cable port 2. cable port 3. cable fixing part

4. Cable fixing column 5. Splice tray 6. Heat shrinkable protection sleeve

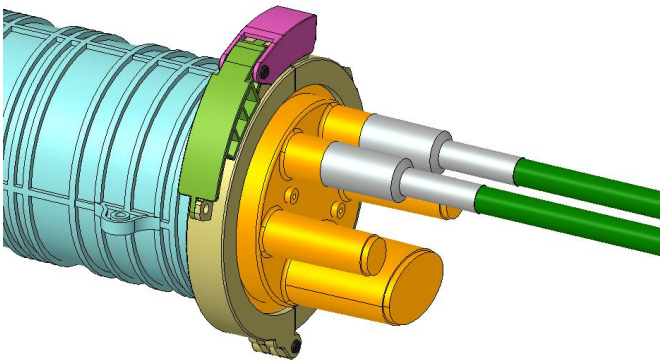
5.7 Optical cable heat shrink sealing

5.7.1 Identify the cable by oil pen and use grind paper to make rough surface of cable jacket

5.7.2 Heat shrink sealing

Wrapping aluminum foil paper on the optical cable, then put the heat shrink tube on cable port and junction of cable. Heat the shrinkable tube by air gun or alcohol burner, then the heat shrink tube fix the cable on cable port tightly.

If two cables entry one cable port, put the branch kit between the two cable, let the metal part of branch kit fixed outside the heat shrink tube, then heat it. (See below picture)



5.8 Sealing inspection & instruction requirements

1. The cable with jacket should be fixed by cable tie in the entry of splice tray.
2. Check the splice tray if close tray cover.
3. Check the inside fixing part if they are fixed tightly.
4. Check the sealing parts are in good condition.
5. Check the heat shrinkable tube sealing if tightly and completely.

5.9 Closure housing installation.

1. Put the closure housing close the splice tray and connect the closure base.
2. Fixed the closure housing and closure base by hoop.

Accessories list

Item	Product	Spcification	Unit	Qty
1	Heat shrinkable protect sleeve	L=60mm	PCS	As per using capacity
2	Cable tie	L=120mm	PCS	10
3	Insulating tape	0.15*17mm*8	roll	1
4	Plastic tube	Φ5*0.6mm white	meter	0.8
5	Heat shrink tube	Φ30*100mm black	PCS	4
6	Heat shrink tube	Φ60*150mm black	PCS	1
7	Branch kit	S size	PCS	1
8	Aluminum foil paper	15cm*10cm with gum	PCS	1
9	Pole mounted accessories	Stainless	set	1

Optional accessories

Item	Product	Specification	Qty	Remark
1	Pole mounted accessories	GPJM-R144-POLE	1	Pole mounted application