

Melbye Raycore Taiwan Co., Ltd

# Specification of Fiber Closure – Horizontal (max 96C)

Part Number: ATBH-9600-N000x-00



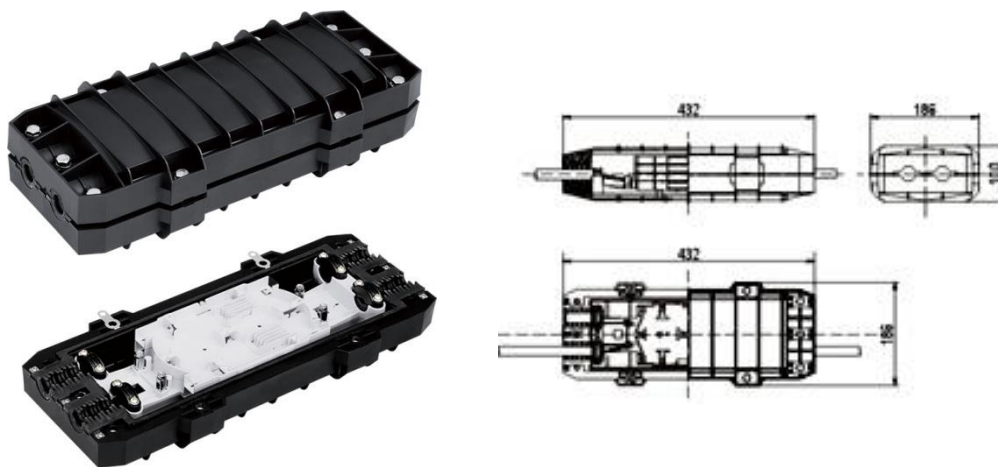
Raycore is a fiber optic product brand name of Melbye Skandinavia AS.



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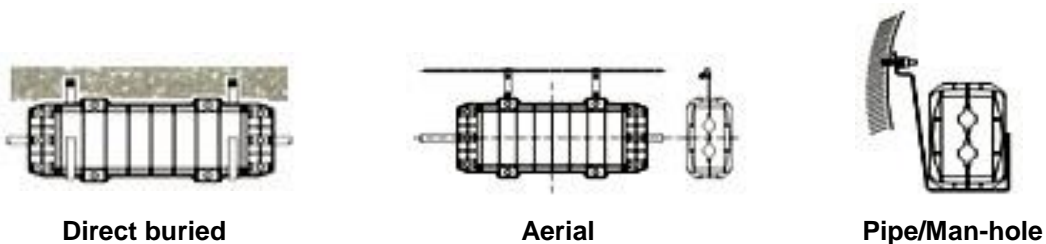
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The body picture

## 1. Installation



Direct buried

Aerial

Pipe/Man-hole

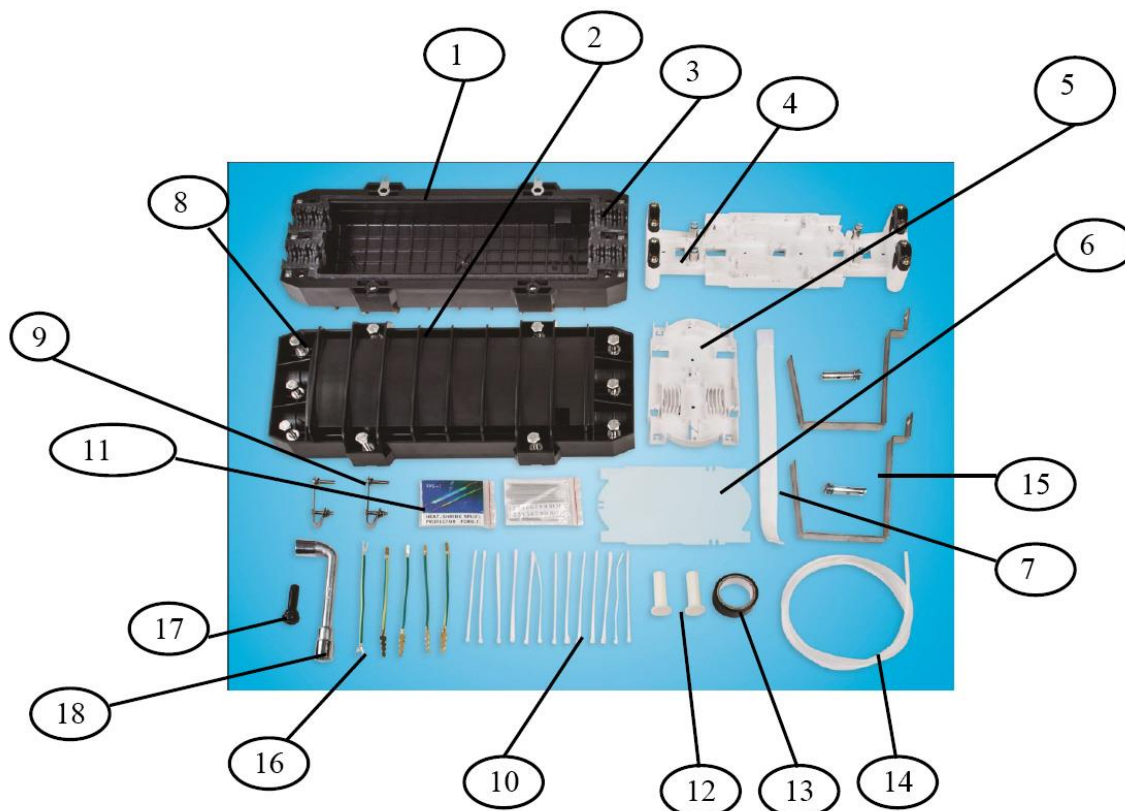
This type closure is universal and meet the enter of non-cut cable. This model has four cable ports and can be used for different applications of optical fiber cable splicing & branching and is suitable for aerial, pipe-lined and direct buried applications. Store the fiber security and meet the connection of armor and non-metal cable. This closure can protect the cable and fiber from the environment, when necessary, branch the cable from closure. The material is special and has good impact resistance, aging resistance, low temperature resistance, in  $-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$  temperature, no any change. This type closure has special seal structure for  $\Phi 10 \sim \Phi 22\text{mm}$  cable, no need other assistant.

## 2. Specifications

Size (mm)	432x186x100	Capacity (Single/Ribbon)	96/360
Weight (kg)	3.8~4.2	Sealing type	Mechanical
Entrances	4	Capacity of Tray	24C/Tray
Suitable cable diameter (mm)	$\Phi 10 \sim \Phi 22$		
Maximum number of trays	4		

### 3. Structure and Components

#### 3.1 Pictures of fiber closure



#### 3.2 Accessories

##### 3.2.1 Main components

No.	Name	Quantity	Remarks
1	Splice Closure Cover	1	LxWxH (mm): 432x186x100
2	Splice Closure Base	1	Fixing internal structures (Special material)
3	Circular seal gasket	2	Waterproof and sealing (Patent)
4	Bracket assembly	1 set	Fix cables and store fibers
5	Fiber splice tray	1	Fiber splice & storage.
6	Tray Bracket	1	For holding splice tray and storing spare fibers
7	Velcro tape	1	Holding splice trays together
8	Fasteners	12	Sealing the cover and base

### 3.2.2 Accessories

No.	Name	Quantity	Application
9	Pothook	1 set	For aerial installation
10	Nylon cable tie (3*120)	12 pieces	Fixing fibers with protective jacket
11	Splice Protective Sleeve (Strength member Φ1.5*60)	No. of fibers+10%	Fiber splice protection
12	Plastic Dummy Plug	6 pieces	For seal when no cable
13	Insulation tape (black)	1 roll	The assistant
14	EVA Transport tubes	1 meter	For protection of loose tube if required (extra length could be ordered)

### 3.2.3 Optional Accessories

No.	Name	Quantity	Application
15	Pipe-lined hoop	1 set	For pipe-lined installation
16	Armor cable grounding wire	1 set	Grounding of armor cable
17	Air pressure valve	1 set	Testing sealing performance
18	Hexangular driver	1 pcs	Fastening the bolts

## 4. Introduction

- 4.1 Fiber optical splice closure used the latest technology of production, meet the ISO9000-2000 standard.
- 4.2 Box life span is more than 25 years.
- 4.3 RC-FCHA compact structure, light weight, mechanical design is reliable in any operation, replacement, storage and transportation.
- 4.4 The sealing of FOSC is reliable, prevent liquid and vapor entering the box.
- 4.5 Provide of mechanical, optical and environment protection. The integrity of the sealed environment can be impact air tested after installed.
- 4.6 The RC-FCHA have integrity of join connection, and good seal performance during installation, application and unloading of fiber optic cable, fiber optic cables. It can reopen and close the box without remove sealing and structure.
- 4.7 No need to change the whole closure when add the new cable. For the closure is suitable for cut

of uncut cable.

4.8 May suit for various type of fiber cables.

4.8.1 Suit for connection all type fiber cables with different structure, such as loosen tube, center jacket, gain groove cable with diameter 10-22mm.

4.8.2 Closure can fix all parts of cable (surface, metal core, Kevlar fiber)

4.8.3 Splice tray inside the closure, can also storage the surplus cables sequential and safety.

4.8.4 Easy to open and reopen. No damage to closure and the fibers inside. No influence to fibers installed when adding new fibers. No need to reseal the fiber installed yet.

4.9 The mechanical of closure requirements which closure must meet are as follow:

4.9.1 The closure is impact resistant especially during the installation and application. It is resistant mechanical pressure, vibration and impaction. The terminal end of optical fiber cable could bear traction, impact, curve and reversal. There is no air leakage and other damage.

4.10 The minimum curve ratio of diameter is  $\geq R30mm$

4.11 The material of closure and the cable are the same. No influence to the cable and the fiber. In the normal outdoor environment, the material can resist dissolve, chemical resistant and prevent form crack. And could prevent the closure from expand when hot climate cold climate.

4.12 The material of closure is no harm to people and environment. Especially it is without any harmful solid or liquid adhesive.

## 5. Technical specification

5.1 General description: The splice closure consists of cover and base. The cover of closure can cover all internal parts; the base of closure could lead fiber cables, and fixing internal components. It adopts dual fixing structure of fiber cable, in order to make the cable anti-bend better stretching. The cover and base made by the modified polypropylene copolymer, high impact strength.

5.2 Size Length: 432mm (including the length of cable port) ×186 mm (W) ×100 mm (H)

5.3 Cable entrances, sealing components

5.3.1 There are 4 cable ports in base of closure, the ports are used for straight cable or cut cable. All cable entrances are mechanical sealing; do not use any type of heat-shrink. The sealing of fiber cable and the body is as all-in-one, only need to screw the bolts tightly to realize the sealing of fiber cable and the body in Synchronization. If the operator

needs to expand the capacity or operate on the cable, can enter the splice tray with spliced fibers, and also can enter the splice tray separately without affecting any workable cable.

#### 5.4 Steel core, optical cable terminal and grounding device.

5.4.1 Fixing fiber cable and the steel core firmly in closure, the steel core cannot excursion or move. The device in internal closure will connect all the metal parts together, and then can be extended to the external of closure to ensure earthing. The metal used is anti-corrosion; all metal parts are low impedance material

#### 5.5 Splice tray

5.5.1 Splice tray can be used for different type of fiber cable, such as loose tube, center tube and exoskeleton design. The material of tray is ABS, not metal material. It can be connected together by hinge, convenient to operate, and cannot effect fibers in other trays. So, it guarantees that all the fibers are splicing according to the prearrange order.

5.5.2 the installation dimension of tray: Min: 180mm (L) x120mm (W) x14mm (H)

5.5.3 It can supply storage coiled splice (min length is 1200mm), and make newly form and splicing from any side of cable.

5.5.4 The min bending diameter is 60mm in splice tray.

5.5.5 The splice tray can be used for splicing types as follows:

5.5.5.1 Primary coating fiber (0.250mm) splices with primary coating fiber (0.250mm)

5.5.5.2 Second-grade coating fiber (0.9mm) splices with primary coating fiber (0.250mm)

5.5.5.3 Second-grade coating fiber (0.9mm) splices with second-grade coating fiber (0.9mm)

5.5.6 The tray has the device that can store splice protective tubes of min 12 pcs. Splice protective tube (heat-shrink type, the length is up to  $61\pm1$ mm, diameter is 3mm), used for protecting spliced fibers.

5.5.7 The holder in tray can be fixed splice protective tube properly, it cannot offset or remove, or fiber add-ons loss as well. The holder is suitable for splice protective tube of single core and ribbon fiber.

5.5.8 When fibers enter into tray, the fixing device is suitable for second coating fiber, the first coating fiber with jacket will not cause any bend loss or damage fibers and second jacket.

5.5.9 The fiber entrance of tray can be fixed quadratic jacket of min 4 pcs.

- 5.5.10 Fibers can be lead from one tray to another tray in closure, it can meet flexible branch splicing and cable splicing of different structure.
- 5.5.11 Under normal operation, any separate fiber can be took out from the tray for maintenance, whereas the rest fibers will not be destroyed.
- 5.5.12 The trays are fixed in closure, it will not loosen or be removed caused by external vibration or movement
- 5.5.13 The min capacity of each tray is 24 cores for primary/secondary coating fiber. Each closure can hold 4 pcs trays on bracket. Use primary coating fiber protective tube when fiber operation. (Material is EVA; unfold type.)
- 5.5.14 Set space to store spare tube.

## 6. Ordering Information:

Part Number	Description
ATBH-9600-N0001-00	Fiber Closure – Horizontal (24C) with 1 fiber tray
ATBH-9600-N0002-00	Fiber Closure – Horizontal (48C) with 2 fiber tray
ATBH-9600-N0003-00	Fiber Closure – Horizontal (72C) with 3 fiber tray
ATBH-9600-N0004-00	Fiber Closure – Horizontal (96C) with 4 fiber tray