Mechanical Dome Closure

Model # : K-ridgeDome Series

K-ridgeDome Series provides high performance for protection and distribution of fiber optical splice point, division of optical signal, and connecting individual subscribers in various application.

Fiber optic splice closure for fiber optic cable may be exposed to severe environment conditions. The closure for fiber optic cable shall provide excellent durability and long-term reliability in those severe conditions.

Each port supports single or multiple cables/drops with specially designed grommet technology.

A Type

B Type

ITEM	K-ridgeDome A Type	K-ridgeDome B Type
Size (L*W)	403×Ø201mm /15.7xØ7.8inch	450×Ø298mm /17.5xØ11.6inch
Weight	2.8kg / 6.17 lbs.	5.5kg / 12.1 lbs.
Inlet Ports	Main 4port	Main 6 port
Cable Dia.	Main cable : 0.571 ~ 0.649 inch (14.5~16.5mm)/ Optional	Main cable : 0.7 ~ 0.78 inch (18 ~ 20mm) / Optional
No. of Splice Tray	Max. 6EA	Max. 8EA
Tray Capacity	24C (Max. 144C) Ribbon 432	36C (Max. 288C) Ribbon 864
Application	Direct Bury, Pole/Wall, Aerial, Below Grade	Direct Bury, Pole/Wall, Aerial, Below Grade

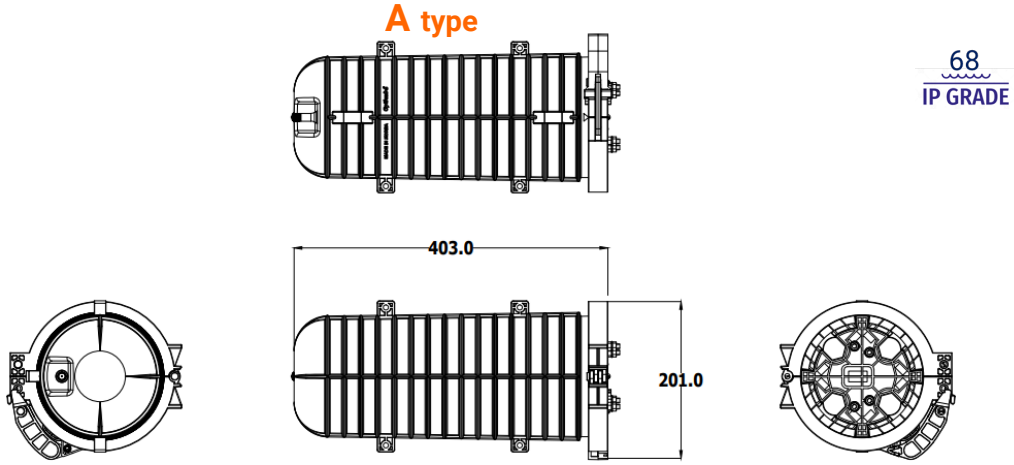
Configuration

- •The ribbed body has high mechanical strength against impact and compression.
- •Reduction of the working time and the safety by using just catch clips.
- •Great quantity of fiber optic cable make an excellent environment performance

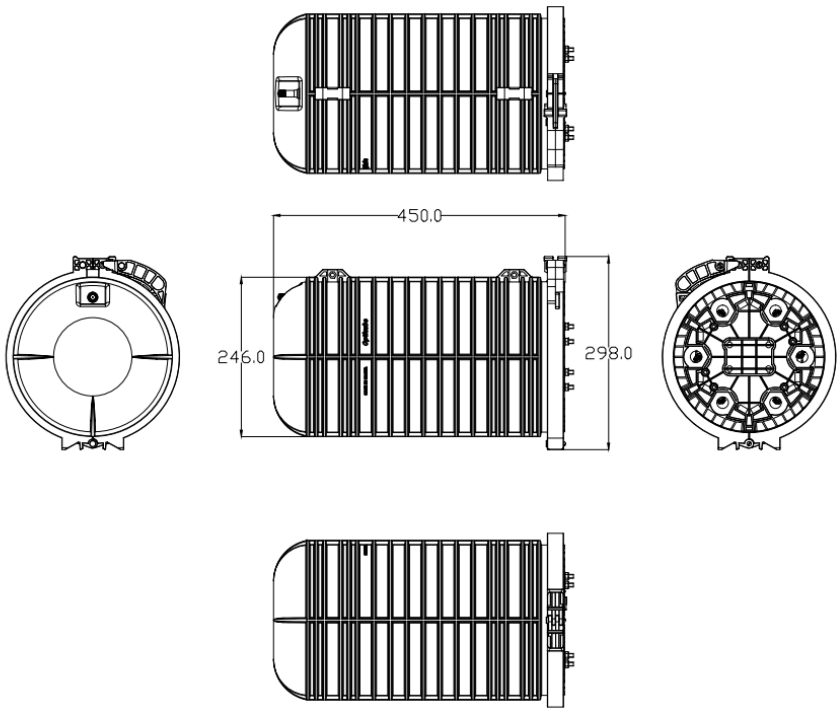
Reliability

The quality of a Fiber optic splice closure is critical to reliable optical transmission performance.
The product shall be produced with ISO-9001, TL-9000, ISO-14001 certified production facilities and quality control system is applied the process from product design to packaging.

A type



B type

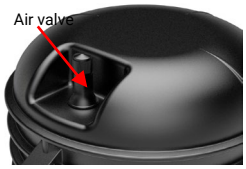


Configuration

No.	ITEM
1	Cover
2	Tray Supporter
3	Splice Tray
4	SUS band Bracket & T/M
5	Base Ass'y
6	Main Clamp

Cover

- Ribbed cover for greater impact and compressive strength
- Air valve for air tightness test

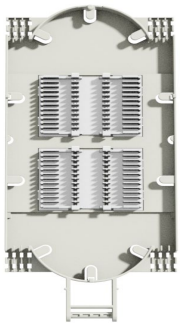


Main Clamp

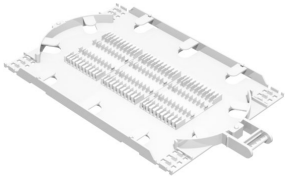
- One touch combined in the form of robustness of the base and cover
- Ease of use for closure assembly

Splice Tray

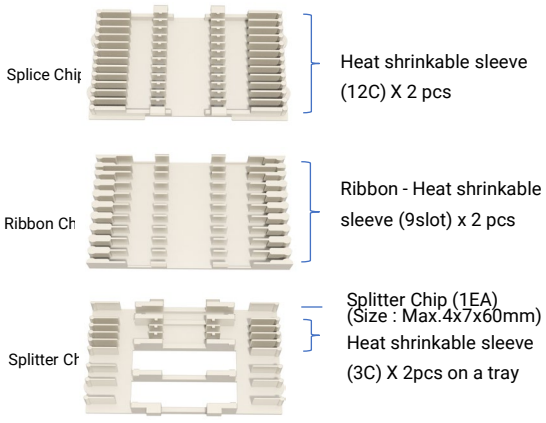
- 6 inlet parts in the tray
- Cable splicing, easy working space and maintenance
- Double layered storage (Maximum 24 fiber by inserting two sleeves in one slit)



A type: 24C



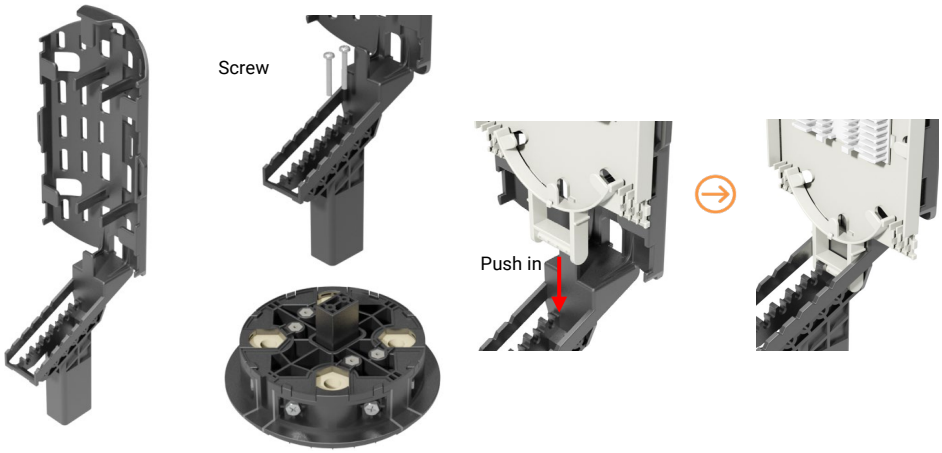
B type: 32C



Configuration

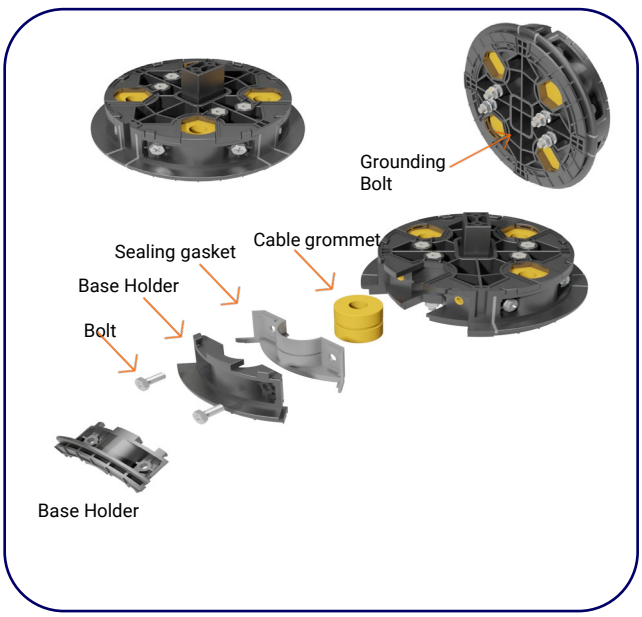
Tray Supporter

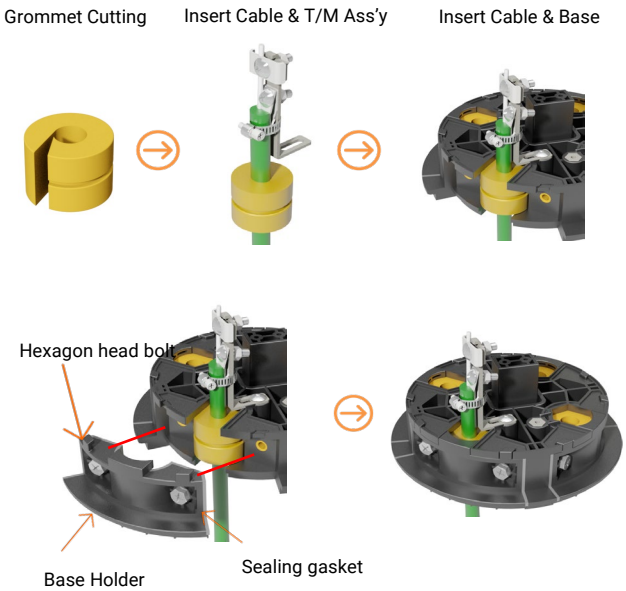
- Efficient storage for loose tube in the unit spool.
- Strong fix of the Tray.



Base Ass'y

- 4 inlet ports configuration.
- Sealing gasket made of silicon for proven water tightness.
- Sheath gasket is also designed for mid span branching by simple cutting





Appendix – Test Procedure

TEST PROCEDURE

General

- This section specifies the closure and its material physical, chemical environmental and mechanical requirements and the tests to be applied for the determination of compliance to these requirements.
- Sample means all completed assembling closure that finished bonding, grounding and connecting equipment.
- For all measures of optical attenuation need to splice and for the measures of just a mechanical performance test (no need for optical attenuation test), insert the cable into the Splice closure.
- Optical fiber shall be fusion spliced to minimize effect from test environment and shall be protected by heat shrinkable protection sleeve at the splice point
- The samples of cable for a performance test shall be prepared with middle size of diameter which is available
- The wavelength for measurement of optical attenuation shall be 1550±30nm or 1310 ±20nm and stability shall be under ±0.01dB
- Test will be completed with temperature 20±5℃ if there is no and special regulation

Mechanical characteristics

ITEM	Test Conditions	Requirements
Sheath Retention	• Condition the closure at -20±2℃ for 2hrs • Mount the closure in a fixture and measure the initial loss • Apply an axial load of D/45*100kg • After 8hours compare the loss. • Repeat the above procedure at 40±2℃.	No mechanical damage
Cable Flexing	• Condition the closure at -20±2℃ for 2hrs • Attach a 10kg weight to the cable 1m • Lower the cable 90˚ for 15min. • Repeat the procedure while rotating the closure 90˚® 720˚ • Repeat the above procedure at 40±2℃.	No mechanical damage Air Tightness test
Cable Torsion	• The sample completed Cable Flexing Test • Condition the closure at -20±2℃ for 2 hrs • Twist the cable at 25cm point • Cycle; CW90˚-> CCW180˚->CW90˚ • Repeat 10cycles. • Repeat the above procedure at 40±2℃.	No mechanical damage
Vertical Drop	• Condition the closure at normal temperature. • Raise the closure to a height of 75cm	No mechanical damage
Compression	• Condition the closure at -20±2℃ for 2 hr. • Measure the diameter or vertical dimension. • Apply a weight of 90kg on 50㎟ area for 15minutes. • Unload a weight and measure the dim. • Repeat the above procedure at 40±2℃.	No mechanical damage
Impact	• Condition the closure at -20±2℃ for 2 hr. • Impact a closure using a drop-tube from 1m • Impact level: 2kg • Repeat the above procedure at 40±2℃.	No mechanical damage
Vibration	• Inner pressure: 6PSI • Measure the loss after 2 fiber splicing. • Amplitude : 1.0mm(peak to peak) • Frequency : 5~55Hz • Direction : X (2 hours)	No greater than ±0.5dB (on test) No greater than ±0.1dB (after test) No mechanical damage

Environmental characteristics

ITEM	Test Conditions	Requirements
Temperature and Humidity	• Measure the loss after 3 fiber splicing. • Assemble the closure, Temp. cycle -30~60℃ • 10Cycle (1cycle is 12hours)	No greater than ± 0.1dB
Chemical resistance	• Inner pressure: 6PSI • Solution: pH2 HCL, NaOH, 10% IGEPAL • Submerge for 7days into the solution.	No mechanical damage
Water resistance	• Put the closure into a1.5m depth- water tank for 20days.	No evidence of water intrusion. (IP 68)

Order Information

K-ridgeDome type- A (B) #1-#2-#3-#4-#5 XQty ea

Example) K-ridgeDome A-O-S-T4-96C-01102 X 3ea

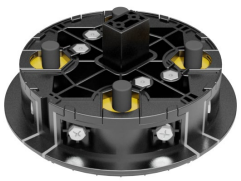
#1	Installation
O	Overhead
M	Manhole
W	Wall Mount

#2	Tray
S	Splice Chip
R	Ribbon Chip
T	Splitter Chip

#3	# of Tray
T1	1
T2	2
T3	3
T4	4
T5	5
T6	6
T7	7
T8	8

#4	# of Sleeve
24C	24
48C	48
72C	72
96C	96
120C	120
144C	144
168C	168
192C	192
216C	216
240C	240
264C	264
288C	288

#5	Grommet
A1501	1 hole
A1601	1 hole
A1102	2 hole
A0804	4 hole
A1507	1+6(7) hole
A0804F	Flat 4hole
B2001	1 hole
B1502	2 hole
B1104	4 hole
B0805	5 hole
B0507	7 hole
C	Customized



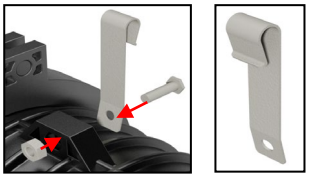
A type example

- Grommet – Blank with Filler grommet preinstalled additional grommet type of customer's choice packed

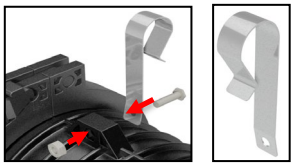
B type example

Installation Hardware

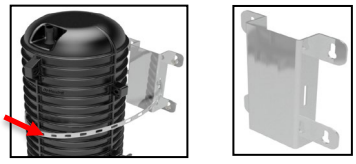
Aerial



Manhole

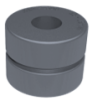
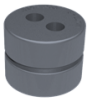
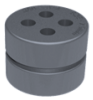
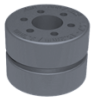


Wall Mount

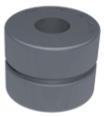
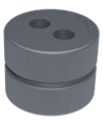
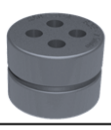
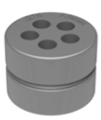


Order Information

Grommet Part # - A type

Grommet						
Tension Messenger Assembling Accessories						
Cable Range Inch	0.512 ~0.590	0.570 ~ 0.649	0.315 ~ 0.433	0.250 ~ 0.312	0.42 ~ 0.60X6 + 0.125X1	0.320 x 0.180
Cable Range mm	13 ~ 15	14.5 ~16.5	8 ~ 11	6.35 ~ 7.9	10.7 ~ 15.2X1 +3.2X6	8.1 x 4.5
Description	1 hole	1 hole	2hole	4hole	7hole	Flat 4hole
Part #	A1501	A1601	A1102	A0804	A1507	A0804F

Grommet Part # - B type

Grommet					
Tension Messenger Assembling Accessories					
Cable Range Inch	0.709 ~0.787	0.512 ~0.590	0.315 ~ 0.433	0.250 ~ 0.312	0.19
Cable Range mm	18 ~ 20	13 ~ 15	8 ~ 11	6.35 ~ 7.9	5
Description	1 hole	2 hole	4 hole	5 hole	7 hole
Part #	B2001	B1502	B1104	B0805	B0507