OPTICAL CABLES

Aerial Weathertight Fiber Optic Splice Closures

FSCO-AS



Features

FSCO-AS Aerial Weathertight Splice Closures are designed for aerial, strand-mount FTTH drop locations where drop cables are spliced to distribution cables.

These free breathing closures combine grommet cable sealing technology and splice tray, the splitter module is also available.

FSCO-AS Aerial Weathertight Splice Closures are suitable for special feature with SSW cable.

- Closure adopts hinge/buckle mechanism which makes dismantling/ assembling easy
- Cable entry section can accommodate 1 main cable with up to 48c SSW cable.
- Can accommodate up to 8 drop cables.
- Convenient attachable splitter module with 1:8 splitter module & 1:4 splitter module for drop cable installation.
- Re-useable grommet sealing open and close easily for adding or removing drop cables providing efficient cable installation with no mess.

Applications

FSCO-AS Aerial Weathertight Splice Closures is suitable for up to 8 drop cable splicing, which can cover most of the applications in the premise wiring networks like Fiber To The Home (FTTH).

Aerial application is possible with this closure. FSCO-AS has chemical and mechanical resistance for all the aerial application areas in the fiber networks.



Structure

Splice type



















Unit: mm



FSCO-AS

Specifications

Physical characteristics

Material	Molded plastic								
Dimension	L 387mm x W 70mmx H 124mm(Splitter module type)								
Weight (without kit)	0.8 kg								
Cable diameter	Main cable	SSW aerial optical cable: 1pc							
Cable diameter	Drop cable	2 x 3 mm : up to 8pc							
Cable ports	2 for main cable								
Maximum fiber storage capacity	Single-fiber	12 splices points							
No. of optical adapter	r Max.8xSC adapter with 1x8 splitter module.								

Note 1: Fiber protection sleeve is attached to the product.

Technical characteristics

ITU-T L.13 complied

Vibration IEC61300-2-1	A=±5mm, f=10Hz, 1,000,000 Cy, No splice case degradation. No damage.							
Cable fixture(bend) IEC61300-2-37	Bending radious:15mm, $\pm 90^{\circ}$ bending, 3Cy/cable. No splice case degradation. No damage.							
Cable retention IEC61300-2-4	Mina cable : 98N Drop cable : 49N. No splice case degradation.							
Temperature cycling IEC61300-2-22	-20C-20C-60C, 8h/Cy 100Cy. No splice case degradation No damage.							
Impact(free drop) IEC61300-2-12	0.75m @-15C & +45 C. No splice case degradation.							
Degrees of protection (IP Code) IEC 60529	IPX4 Protected against Wind driven rain proof. (option :IP54 Wind driven rain proof & no effective by dust.)							
Salt mist IEC61300-2-26	5% NaCl for 5days, without rust. No damage.							
Re-entries IEC61300-2-33	At least 1 thermal cycle to repeat Open & Close the closure sleeve 10 times. No damage.							

Ordering Information





OPTICAL CARLES

Sealed Fiber optic splice Closure

FSCO-CB / FSCO-CB3



Features

Cable entrance configuration is In-line, which is suitable for space constrained hand holes (also possible to be used in man-holes, telephone tunnels and aerial, etc)

Closure adopts band mechanism, which makes dismantling/assembling easy.

Cable entry section can accommodate maximum 6 cables (main cable 2pcs, branching cable 4pcs)

Supports loose tube cable and slotted core cable.

Applications

Closure is suitable for up to 96 single fiber splicing, which can cover most of the applications in the fiber distribution networks like Fiber To The Home / Fiber To The Curb (FTTH/FTTC). Underground, aerial, or pedestal applications are possible with this closure.









FSCO-CB / FSCO-CB3

Specifications

Physical characteristics

Item		FSCO-CB	FSCO-CB3				
Material		 Molded plastic (Sleeve, Splice tray) Stainless steel (band), Anti-rusted steel (Connecting bar, Organizer) Synthetic rubber (Sleeve gasket, end seal tape) 					
Dimension (mn	n)	W140 $ imes$ H126 $ imes$ L340	$\rm W158 \times H145 \times L405$				
Weight (kg)		Approx. 3	Approx. 3				
Fiber storage t	ray	Maximum 6	Maximum 8				
Cable capacity		2 for main cable 2 for branch cable	2 for main cable 4 for branch cable				
Maximum Fiber	Single fiber	72 fibers (12 fibers / tray)	96 fibers (12 fibers / tray)				
Storage	4-fiber ribbon	120 fibers (5 ribbons / tray)	160 fibers (5 ribbons / tray)				
Cable diameter	r (mm)	8 - 21					

Note 1 : Fiber protection sleeve is attached to the product.

Technical charac	ITU-T L.13 complied	
Vibration	49kPa, A=±5mm, f=10Hz, 1,000,00	0 Cy,
IEC61300-2-1	No damage, No leakage.	
Cable fixture (bend)	49kPa, ±90° bending radius 6D, 6C	у.
IEC61300-2-37	No damage, No leakage.	
Cable torsion	49kPa, 400mm, ±90 degree, -15°C	and 45°C, 5Cy.
IEC61300-2-5	No damage, No leakage.	
Cable axial tension	49kPa, D/45 x 1000N (Max.1000N),	1hr
IEC61300-2-4	No leakage	
Temperature cycling	-20°C ~ 60°C, 8h/Cy 100Cy. Then fi	II 49kPa air-pressure,
IEC61300-2-22	No leakage.	
Impact	0.5kg, 0.3m @-10C.	
IEC61300-2-12	No damage, No splice case degrada	ation.
Immersion	Water depth 5m, 7days,	
IEC61300-2-23	No water intrusion.	
Air tightness	49kPa@Room temperature, 15min.	
IEC61300-2-38	No leakage.	
Degrees of protection	IP67 : Water proof and No effective I	by duct
(IP code) IEC60529		
Compression	1000N, 25cm2, 10min, -15°C and 48	5°C
IEC61300-2-10	No leakage	
Chemical Resistance	pH2, pH12 for 5 days.	
IEC61300-2-34	No leakage, Visual appearance.	
Rust resistance	Salt spray 5% NaCl for 5days, No ru	st
IEC61300-2-26		

b3

Ordering Information FSCO-CB / <u>**</u> / <u>X</u> / <u>Y</u> / <u>Z</u> / <u><a1><a2><b1><b2></u> **Product Code** Tray type BH or BL Cable size The size of cable clamp and sealing washer Cable diameter D (mm) Presence of gas valve and earth terminal $8 \leq \mathsf{D} \leq 11$ S (Yes:2 No:1) $11 \le D \le 16$ М $16 \le D \le 21$ L Number of slack Tray (1~6) F End packing Presence of optional parts (Yes:2 No:1) a1 b1 FSCO-CB or b2 a2 FSCO-CB3

FSCO-CB3 / ** / X / Y / Z / <a1><a2><a3><b1><b2><a3>

Option

C sleeve	Fro FRP tension member use. Please order when Non-metallic cable installation
Re-entry kit	End seal tape 4pcs, Sleeve gasket 2pcs
Cable kit	Size S, M, L for additional branching cable

a3

OPTICAL CABLES

Sealed Fiber Optic Splice Closure

FSCO-L5BR



Features

Cable entry section is single-sided dome structure which is suitable for space constrained hand holes (also possible to be used in man-holes, telephone tunnels etc.).

- Closure adopts hinge/buckle mechanism which makes dismantling/ assembling easy.
- Cable entry section can accommodate maximum 6 cables (main cable 2pcs, branching cable 4pcs).
- Supports both loose tube cables and slotted core cables
- Optional splitter tray accommodates 2pcs 1 × 8 splitters and support maximum 16 drop cables
- Suitable for apply in limited space areas such as hand holes
- Fully mechanical design, fiber reinforced plastic
- Recommendation of life span for 15 to 20 years (depends on environment)
- Concept of separate cable entries system
- Laser caution signs provided on cover of the top tray
- 360-deg access permits complete access to all wirework and equipment

Applications

- Up to maximum 240 fibers (4-ribbon fiber) splicing FTTH distribution networks
- Applicable for both branch cables and drop cables
- Chemical and mechanical resistance for underground, aerial and pedestal installation



Structure

• Fuse model structure



• Connector model structure









FSCO-L5BR

Specifications

Physical characteristics

Material	 Molded plastic (Cover, Splice tray, Tray base, End plate, Cable clamping) Stainless steel (Tension member clamp, Drop cable clamp, adapter tray), Synthetic rubber (Cover gasket, Valve gasket) 									
Dimension	L435mm × D230mm									
Weight (without kit)	Approx. 3.7kg									
Cable diameter Main cable:12-21 mm, Branch cable:8-17.5mm Drop cable :2 × 3mm(flat type) , 3mm dia.(round type)										
Cable capacity	Main cable : 2cables Branch cable :2cables - 4cables* (*cannot be accommodated when 3mm round type dro cables are installed) Drop/indoor cable :Max 16cables (*cannot be accommodated when 4 branch cables ar installed)									
Cable ports	1 oval port for 2 main c 4 round ports for branc	ables h cables or drop/indoor cables								
Splice tray capacity	Max. 6 trays									
SC adapter capacity	Max. 16 pcs									
Splitter capacity	1 ×4: 4pcs or 1 ×8: 2pcs or 1 ×16: 1pcs									
Maximum fiber storage	Single fiber	144 fibers (24 fiber/tray)								
capacity	4-fiber ribbon	240 fibers (10 ribbon/tray)								
Unreusable parts	Heat shrink tube, brand	ching clip								

Vibration	49kPa, A=±5mm, f=10Hz, 1,000,000 Cy,									
IEC61300-2-1	No damage, No leakage.									
Cable fixture (bend)	49kPa, ±90° bending radius 6D, 6Cy.									
IEC61300-2-37	No damage, No leakage.									
Cable torsion	49kPa, 400mm, ±90 degree, -15°C and 45°C, 5Cy.									
IEC61300-2-5	No damage, No leakage.									
Cable axial tension	49kPa, D/45 x 1000N (Max.1000N), 1hr									
IEC61300-2-4	No leakage									
Temperature cycling	-20°C ~ 60°C, 8h/Cy 100Cy. Then fill 49kPa air-pressure,									
IEC61300-2-22	No leakage.									
Impact	0.5kg, 0.3m @-10C.									
IEC61300-2-12	No damage, No splice case degradation.									
Immersion	Water depth 5m, 7days,									
IEC61300-2-23	No water intrusion.									
Air tightness	49kPa@Room temperature, 15min.									
IEC61300-2-38	No leakage.									
Degrees of protection (IP code) IEC60529	IP67 : Water proof and No effective by duct									
Compression	1000N, 25cm ² , 10min, -15°C and 45°C									
IEC61300-2-10	No leakage									
Chemical Resistance	pH2, pH12 for 5 days.									
IEC61300-2-34 No leakage, Visual appearance.										
Rust resistance	Salt spray 5% NaCl for 5days,									
IEC61300-2-26	No rust									

ITU-T L.13 complied

Note 1: Defaults to SC/UPC type adapter and splitter, please contact your local distributor for SC/APC type

FSCO-L5BR-X / Y

Note 2: Fiber protection sleeves are attached to the product. Note 3: Pole mount bracket is optionally available

Ordering Information

Product Code

Type of fiber capacity: 12, 24, 36, 48, 72, 96, 120, 144 fibers

Technical characteristics

Number of splice tray: 1, 2, 3, 4, 5, 6





FSCO-BU Series



Features

Cable entry section is single-sided dome structure which is suitable for space constrained hand holes (also possible to be used in man-holes, telephone tunnels etc.).

- Closure adopts hinge/buckle mechanism which makes dismantling/ assembling easy.
- Cable entry section can accommodate maximum 8 cables (main cable: 2, branching cable: 6).
- Supports loose tube cables, slotted core cables, and Spider Web Ribbon[®] (SWR) cables
- Suitable for apply in limited space areas such as hand holes
- Fully mechanical design, fiber reinforced plastic
- Concept of separate cable entries system
- 360-deg access permits complete access to all wirework and equipment

Applications

- Up to 864 fibers (12f-SWR) splicing FTTH distribution networks
- Chemical and mechanical resistance for underground, aerial and pedestal installation



Structure

Middle Type



Large Type







FSCO-BU Series

Specifications

Physical characteristics

Item		Middle Type	Large Type						
			Splice tray, Tray base, End						
Material		plate, Cable clamping)							
		Stainless steel (Tension member clamp)							
		 Synthetic rubber (Cover gasket, Valve gasket) 							
Dimension		H480mm $ imes \phi$ 260mm	H585mm $\times \phi$ 260mm						
Weight (withou	t kit)	Approx. 6.5kg Approx. 7.0kg							
Cable diameter			ϕ 10-22 mm,						
Cable diameter		Branch cable	: <i>ф</i> 10-17.5mm						
Cable capacity			e : 2cables						
ouble suparity		Branch cable :6 cables							
Cable ports		1 oval port for 2 main cables							
Cable ports		6 round ports for branch cables							
	12f-SWR	8 trays (6 splices /tray)	12 trays (6 splices / tray)						
Splice	8f-SWR	8 trays (8 splices / tray)	12 trays (8 splices / tray)						
tray capacity	4f-SWR	8 trays (8 splices / tray)	12 trays (8 splices / tray)						
	Single fiber	17 trays (12 splices /tray)	24 trays (12 splices / tray)						
Splitter	SWR	1 × 2: 4pcs, 1 × 4: 2pcs, 1 × 8: 2pcs							
capacity *1	Single fiber	1 × 2: 2pcs, 1 × 4	: 1pcs, 1 × 8: 1pcs						
	12f-SWR	48 imes 12f-SWR / 576 fibers	72 × 12f-SWR / 864 fibers						
Maximum	8f-SWR	64 × 8f-SWR / 512 fibers	96 × 8f-SWR / 768 fibers						
fiber capacity	4f-SWR	64 imes4f-SWR / 256 fibers	96 × 4f-SWR / 384 fibers						
	Single fiber	204 fibers	288 fibers						
Unreusable par	rts	Heat shrink tube	e, branching clip						

Vibration	49kPa, A=±5mm, f=10Hz, 1,000,000 Cy,
IEC61300-2-1	No damage, No leakage.
Cable fixture (bend)	49kPa, ±90° bending radius 6D, 6Cy.
IEC61300-2-37	No damage, No leakage.
Cable torsion	49kPa, 400mm, ±90 degree, -15°C and 45°C, 5Cy.
IEC61300-2-5	No damage, No leakage.
Cable axial tension	49kPa, D/45 x 1000N (Max.1000N), 1hr
IEC61300-2-4	No leakage
Temperature cycling	-20°C ~ 60°C, 8h/Cy 100Cy. Then fill 49kPa air-pressure,
IEC61300-2-22	No leakage.
Impact	0.5kg, 0.3m @-10C.
IEC61300-2-12	No damage, No splice case degradation.
Immersion	Water depth 5m, 7days,
IEC61300-2-23	No water intrusion.
Air tightness	49kPa@Room temperature, 15min.
IEC61300-2-38	No leakage.

IP67 : Water proof and No effective by duct

1000N, 25cm², 10min, -15°C and 45°C

pH2, pH12 for 5 days. No leakage, Visual appearance.

Salt spray 5% NaCl for 5days,

No leakage

No rust

ITU-T L.13 complied

*1 A tray for SWR fiber shall be able to accommodate an optical splitter

Note 1 : Fiber protection sleeve is attached to the product.

Ordering Information

Product Code FSCO-BU M 8 - R 8 Type of Closure: BU (BU: Butt closure) Size of Closure: M (M: Middle type) (L: Large type) Number of cable : 8 cables

The number of tray: 8 trays =Ribbon Fiber= (1~8 for Middle type) (1~12 for Large Type)

Technical characteristics

=Single Fiber= (1~17 for Middle type) (1~24 for Large Type)

Degrees of protection (IP code) IEC60529

Chemical Resistance IEC61300-2-34

Compression IEC61300-2-10

Rust resistance IEC61300-2-26

Type of fiber tray: R

(R: SWR fiber type) (S: Single fiber type)

Notes

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OPTICAL CABLES

FBCO-DRP



Features

- Provides for accommodating and protecting a connector, fusion splice, and mechanical splice jointed point in between drop/low friction cables.
- Provide easy of repair and maintenance for existing aerial drop cables.

Applications

- Can accommodate drop cable messenger wire. So that the closure itself can be hung in between a drop point and a premise.
- Can be mounted on a wall with using plastic wall cleats.

Configuration

accommodates drop cable

segment repair point





accommodates FAST Connectors jointed point



accommodates mechanical spliced point

Structure
 Outside Structure



Inside Structure





FBCO-DRP

Specifications

Physical characteristics

Installation	Aerial in line installation and wall mount * Possible Installation area depends on cable specifications.					
Connection Connector						
Number of connection	1					
Connector type SC Connector						
	Figure-8 Drop Cable (Approx. $2.0 imes 5.3$ mm)					
Applicable cable	Low Friction Indoor/Outdoor Cable (Approx. 2.0 × 1.6 mm)					
	Indoor Cable (Approx. 2.0×3.1 mm)					

Note 1 : Fiber protection sleeve, adapter, FAST-SC connectors, or Cable Grip Splice is not attached to the product.

Technical characteristics

Temperature Cycling with Humidity	42 day cycling -40 °C \sim +75 °C with 95% RH					
Degrees of protection (IP code) IEC60529	IPX4: Water splashing against the enclosure from any direction shall have no harmful effect					
Flammability	UL94-V0					
Heat temperature storage 240 hours at +70 °C						

