

Ordering Guide of the Fiber-Optic Splice Closure (FOSC-400)



This document provides assistance with the selection of FOSC-400 closures. It includes the following sections:

1 Product description	2
2 Ordering information	3
2.1 Closure alternatives	3
2.2 Accessories	4
2.2.1 Cable accessories	4
2.2.2 Splicing trays and storage baskets	4
2.2.3 Mounting kits	4
2.2.4 Miscellaneous	5
2.2.5 Installation kit components	5
2.3 Tools	5
3 Product guide	6
3.1 Closure description	6
3.2 Closure dimensions	7
3.3 Closure capacity	8
3.3.1 General (a)	8
3.3.2 Splicing trays	8
3.4 Accessories	9
3.4.1 Cable accessories	9
3.4.2 Mounting kits	10
3.4.3 Installation kit components	10
3.5 Tools	11

1 Product description



FOSC4FAM.JPG

The FOSC 400 products are butt-type closures used in the outside plant network when mass splice storage is the main requirement.

They are available in four different sizes and are typically used as track joints.

The FOSC-400 closures are made of a thermoplastic material.

The base and dome are sealed with a clamp and an O-ring system.

The base has one oval entry port for looped (uncut) cable and, depending on the closure size, 2, 4, 5 or 8 round ports for single cable exit.

The cable seals are manufactured from heat-shrinkable material.

Depending on the closure size, the splice storage and organizer trays can accommodate from 6 to 768 single fiber splices.

All splicing trays are hinged at one end so that any fiber can be accessed without:

- disturbing fiber on other trays,
- kinking buffer tubes, or
- introducing losses.

All cable termination and sealing functions are provided with the closures.

Uncut loose buffer tube storage is provided in optional storage baskets.

2 Ordering information

2.1 Closure alternatives

The FOSC-400 closure is available in 7 different sizes.

Different configurations are possible, depending upon the application. Section 3 gives full product descriptions.

FOSC-400XX – XXX-X-X X X

Closure size

AS	420 mm - 4 round ports
A4	420 mm - 4 round ports
A8	410 mm - 8 round ports (a)
B2	540 mm - 2 round ports
B4	540 mm - 4 round ports
D5/B	505 mm - 5 round ports
D5	710 mm - 5 round ports

Valve for flash testing

V	Valve
N	No valve

Ground feed-through

G	Grounding
N	No grounding (N/A for D5/B)

Moisture cable blocking

B	Blocking
N	No blocking

Type of splicing trays

NT If no trays need to be included.

Closure Size	trays with splices at the exterior of the tray	trays with center modules
AS,A8	S6, A6	
A4,A8	S08, S16, S24 A16, A24 4R4	12, 16, 24, 24RS
B2,B4,D5/B	S12, S24 A24 6R4	12, 16, 24, 24RS
D5	-	36, 48, 72, A72 S96, L96, A96 96RS, RT, RT/P

Note: S or blanc for SMOUV 45mm, A for ANT, L for SMOUV 60mm, R for Ribbon RS for RECORDsplice

Number of splicing trays in kit

0, 1 ... 12	For AS closures
0, 1 ... 3	For A4 closures
0, 1 ... 4/8	For A8 closures (b)
0, 1 ... or 6	For B closures (c)
0, 1 ... or 12	For D5/B
0, 1 ... or 8	For D5 closures (d)

- A8 closure can accept a mix of standard and slim trays, contact product management for details
- Maximum 8 trays in case of S6 or A6 tray type
- B closure can initially be fitted with 6 trays, however, retrofitting a standard "B" closure (delivered with 4 trays or fewer) with a 5th and 6th tray is not possible.
B-closure with a capacity of up to 6 trays can be ordered (with up to 5 trays pre-installed), namestrung becomes FOSC-400B4-XX-X/6-...
If 5 or 6 trays are required, a storage basket cannot be used.
- If 7 or 8 trays are required, a storage basket cannot be used.

Standard kit content

- Dome
- Clamp
- O-ring
- Base including a tray tower to hold the splicing trays
- FOSC trays (quantity according to the ordering description)
- Transportation tubes with tie wraps (part of tray kit)
- 1 oval port seal kit including cleaning tissues, aluminum tape and abrasive strips
- Shield continuity wires for closure sizes B and D (not shown on the picture)
- Loose tube storage sleeve for closure size A/B (not shown on the picture below)
- 1 or 2 bags with silica gel (75 grams each), depending on the size of the closure
- Installation instructions



2.2 Accessories

2.2.1 Cable accessories

Name	Qty/Pk	Description
FOSC-A-CSEAL-1NT	1 pc	A4 and AS-size closure: tubular cable sealing kit for 1 cable in any round port
FOSC-A8-CSEAL-1NT	1 pc	A8-size closure: tubular cable sealing kit for 1 cable in any round port
FOSC-A8-CSEAL-COLD-8	8 pc	A8-size closure: tubular cold seal for aerial or pedestal applications
FOSC-A-CSEAL-2NT	1 pc	A-size closure: tubular cable sealing kit for 2 cables in the oval port
FOSC-B/D-CSEAL-1NT	1 pc	B or D-size: tubular cable sealing kit for 1 cable in any round port
FOSC-B/D-CSEAL-2NT	1 pc	B or D-size: tubular cable sealing kit for 2 cables in the oval port
FOSC-CSEAL-1NW-S6073	1 pc	Wraparound cable seal sleeve for use on any round port (repair or re-entry).
FOSC-CSEAL-2NW-S6073	1 pc	Wraparound cable seal sleeve for use on the oval port (repair or re-entry).
FOSC-FUNNEL-5+1-KIT	1 pc	Kit to split a central or slotted core cable into a loose tube construction (1 in, 5 out)
FOSC-FUNNEL-10+1-KIT	1 pc	Kit to split a central or slotted core cable into a loose tube construction (1 in, 10 out)

2.2.2 Splicing trays and storage baskets

Splicing trays are normally ordered as part of the closure kit.

See the ordering guide of FOSC splicing trays and baskets for more information and ordering references of storage baskets and splicing trays (if they need to be ordered separately).

Note: if a mixture of tray types is used, notice that trays with splices at the exterior of the tray do not fit on top of trays with splice modules, they only fit underneath.

2.2.3 Mounting kits

Name	Qty/Pk	Description
FOSC-A/B-POLE-MOUNT	1 pc	Plastic bracket for mounting A or B closure to pole or wall
FOSC-A/B-UNI-MOUNT-A	1 pc	Metal bracket for mounting A or B closure aerially
FOSC-A/B-UNI-MOUNT-P	1 pc	Metal bracket for mounting A or B closure onto a pole
FOSC-A/B-UNI-MOUNT-R	1 pc	Metal bracket for mounting A or B closure onto a rod
FOSC-A/B-UNI-MOUNT-W	1 pc	Metal bracket for mounting A or B closure onto a wall
FOSC-A/B-MOBRA	1 pc	Bracket for mounting the A or B closure on a wall
FOSC-400D-POLE-MOUNT	1 pc	Bracket for mounting D5 closure on a pole or wall
FIST-UNI-MOUNT-W	1 pc	Metal bracket for mounting D5 - D5/B closure onto a wall
FOSC-DMARC-MOBRA	1 pc	Bracket for mounting the D5/B closure on a wall

Consult the MOBRA ordering guide for a schematic overview.

2.2.4 Miscellaneous

Name	Qty/Pk	Description
FOSC-A/B-O-RING-SEAL-KIT	1 pc	Optional re-entry/repair kit with desiccant, O-ring, and cleaning tissues
FOSC-A/B-VAULT-BAG	1 pc	Flame retardant bag to cover closure for vault applications
FOSC-A-SHIELD-CON-KIT	1 pc	6 shield continuity wires + clamp + 5 wire connection clips
FOSC-D-O-RING-SEAL-KIT	1 pc	Optional re-entry/repair kit with desiccant, O-ring, and cleaning tissues
FOSC-D-VAULT-BAG	1 pc	Flame retardant bag to cover closure for vault applications

2.2.5 Installation kit components

Name	Qty/Pk	Description
FISTV-E7100-1005	10x 100g	Silica gel for inside the closure, to be replaced after each re-entry

2.3 Tools

Name	Qty/Pk	Description
FACC-HEAT-GUN-220V	1 pc	1460W, 220V hot air gun to shrink the cable seals. The kit includes a hot air gun reflector.
FACC-HEAT-GUN-110V	1 pc	1460W, 110V hot air gun to shrink the cable seals. The kit includes a hot air gun reflector
FACC-S-HOT-AIR-TORCH	1 pc	Sievert hot air gas torch kit including handle and nozzle used to shrink the cable seals when only gas is available
FOSC-WORK-STAND	1 pc	Work stand to keep all FOSC closures in horizontal position during installation.

3 Product guide

3.1 Closure description

Dome

The dome is made from a polymer, ribbed for extra strength.

Base

The base provides the foundation for the splicing trays. A number of round ports (quantity depends on the closure size) and one oval port for cable entry/exit are provided in the base.



7N3K4456.JPG



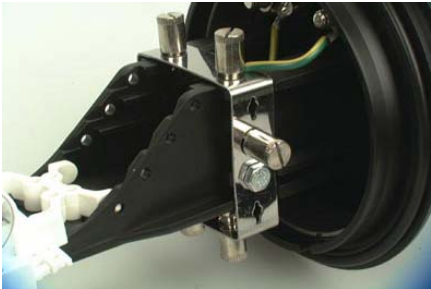
GC2OG009.JPG

Dome to base seal

This seal consists of a mechanical clamp and a rubber O-ring.

FOSC tray tower

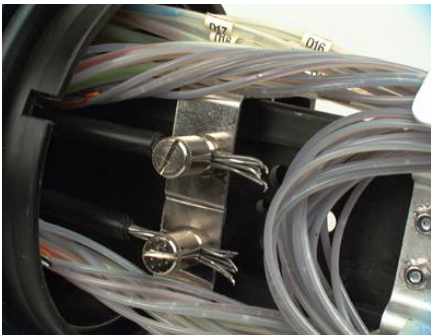
A mounting bracket is provided onto which the splicing trays are hinged.



MIS007.JPG

Cable strength member fixation point

The central strength member of each individual cable can be attached at this point.



F4B6.JPG



MIS012.JPG

Ground feed-through

A sealed grounding feed-through bolt can be pre-mounted in the base to connect metallic components to an external ground.

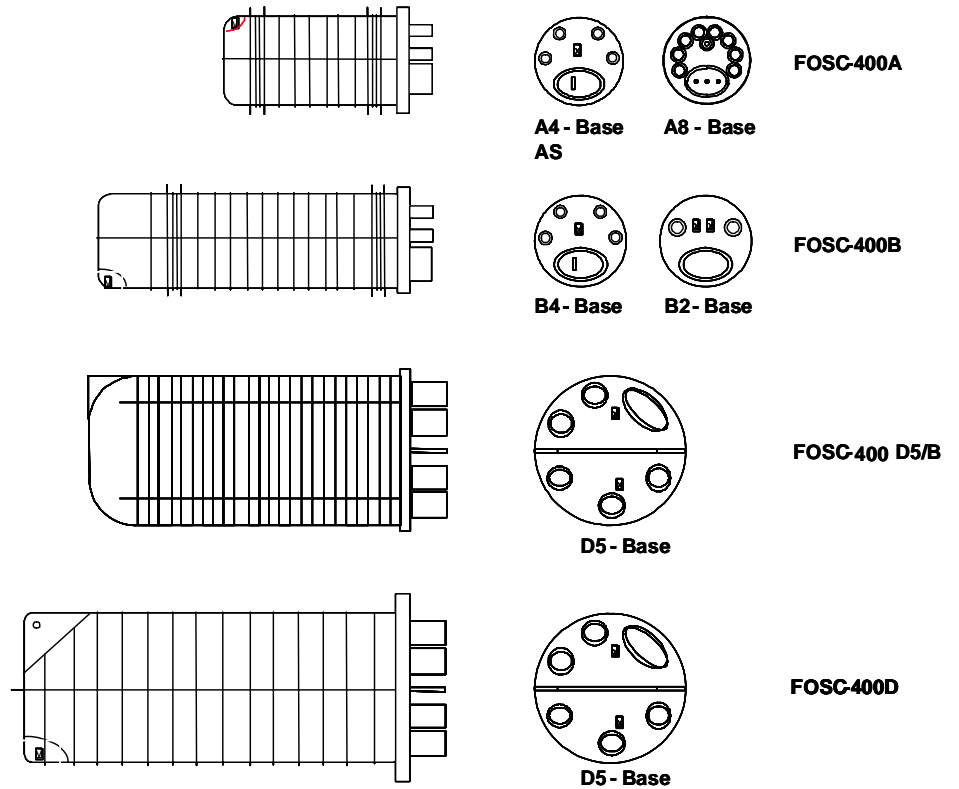


7N3K4455.JPG

Flash test valve

This is pre-mounted in the dome if pressure access is required.

3.2 Closure dimensions



V = Optional flash testing capability X = Optional grounding feed through lug(s).

Dimensions in mm	Closure size					
	AS/A4	A8	B4	B2	D5/B	D5
Total closure length	420	410	540	540	505	710
Closure outer diameter	183	183	183	183	267	267
including clamp	205	205	205	205	290	290

3.3 Closure capacity

3.3.1 General (a)

	Closure size						
	AS	A4	A8	B4	B2	D5/B	D5
FOSC tray capacity							
# FOSC trays (no storage basket)	12	2 / 3	4 / 8 (b)	4 / 6 (c)	4 / 6	12	8
# FOSC trays (with storage basket)	N.A.	2	4 / 8 (b)	4	4	N.A.	6 / 4 (d)
Splicing capacity							
Single fiber	72	48 / 72	96 / 48	96 / 144	96 / 144	288	768
Ribbon 12							1152
Cable ports							
1 oval port for 2 cables with Ø range each	10-25 mm	10-25 mm	10-25 mm	10-25 mm	10-25 mm	10-25 mm	10-25 mm
# round ports	4	4	8	4	2	5	5
cable Ø range of the round ports	5-19 mm	5-19 mm	5-10 mm	5-19 mm	5-28 mm	5-28 mm	5-28 mm

Notes:

- Tray capacity is based on 45 mm fusion splice protectors (such as SMOUV-1120-02).
- The A8 closure's capacity is 4 standard A trays or 8 slim trays, but it accepts as well a mixture of standard A and slim trays.
- B4 closure can initially be fitted with 6 trays. The loose tube storage capacity is very limited in this case (a few tubes can be stored in a plastic bag, consult the local sales engineer for more information). Adding to an installed standard 'B' closure a 5th and 6th tray is impossible.
B-closure with a capacity of up to 6 trays can be ordered (with up to 5 trays pre-installed), namestring becomes FOSC-400B4-XX-X/6-...
- 6 trays in case of a standard D-basket, 4 trays in case of a tall basket (see FOSC tray O.G. for basket info).

Please contact your local representative for detailed information.

3.3.2 Splicing trays

See the FOSC splicing trays ordering guide for characteristics and standard ordering information.

Note: if a mixture of tray types is used, notice that trays with splices at the exterior of the tray do not fit on top of trays with center splice modules or on top of splitter trays, they only fit underneath.

3.4 Accessories

3.4.1 Cable accessories



SEA010.JPG

Tubular cable seal kit for round ports

FOSC-A-CSEAL-1NT (incl. strength member fixation) (for A4 and AS size)

FOSC-A8-CSEAL-1NT (incl. strength member fixation) (for A8 size)

FOSC-B/D-CSEAL-1NT (strength member fixation is premounted on the closure) (for B/D size)

Cable seal kit to seal cables in the round ports.

The seal kit diameter range accommodated is 5-32 mm. (5-25 mm for FOSC-A8 size)



IMG_6111.JPG

Tubular cold seal for round ports

FOSC-A8-CSEAL-COLD-8 (for A8 size only)

Cold seal for aerial or pedestal applications. 8 seals/kit., incl. strength member fixation.

Cable diameter range 3.5 – 10 mm.



SEA012.JPG

Wraparound cable seal kit for round ports

FOSC-CSEAL-1NW (for all sizes)

This wraparound version is used in case of re-entry/repair. Diameter range 5-32 mm



SEA008.JPG

Tubular cable seal kit for oval ports

FOSC-A-CSEAL-2NT (incl. strength member fixation)

FOSC-B/D-CSEAL-2NT

Cable seal kit to seal two cables in oval outlet port.

The diameter range accommodated is 10-25 mm.

This seal is used when uncut fibers are stored in an optional basket.



SEA013.JPG

Wraparound cable seal kit for oval ports

FOSC-CSEAL-2NW (for all sizes)

A wraparound version of above sleeve is also available and is used in case of re-entry/repair.



F4002.JPG

Slotted core/central core termination kit**FOSC-FUNNEL-X+1-KIT**

This kit transforms a slotted or central core (OD = 8 mm) into a loose tube construction.

Two different versions are available: with 5 x 2.8 mm or 10 x 1.8 mm outgoing transportation tubes, included in the kit.

(In the product name, X = 5 or 10)

3.4.2 Mounting kits

For more info see MOBRA ordering guide.

3.4.3 Installation kit components**Silica gel****FISTV-E7100-1005**

Silica gel for inside the closure, to be replaced after each re-entry.

This kit contains 10x 100g.



I&C034.JPG

3.5 Tools



T026.JPG

FACC-HEAT-GUN-220V

1460W, 220V hot air gun to shrink the cable seals.
The kit includes a hot air gun reflector.

FACC-HEAT-GUN-110V

1460W, 110V hot air gun to shrink the cable seals.
The kit includes a hot air gun reflector.



T011.JPG

FACC-S-HOT-AIR-TORCH

Sievert hot air gas torch kit including handle and nozzle used to shrink the cable seals when only gas is available.



MB004.JPG

FOSC-WORK-STAND

This is a help tool to keep the closure in a horizontal position while working on it.
All closure sizes can be installed.

Tyco Electronics Raychem NV

Diestsesteenweg 692
B-3010 Kessel-Lo, Belgium
BTW BE 0405.721.306
RPR Leuven ING 330-0816041-34

www.tycoelectronics.com

www.telecomosp.com

Tyco Electronics, TE logo and FIST are trademarks.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, Tyco Electronics makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Tyco Electronics' obligations shall only be as set forth in Tyco Electronics' Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of Tyco Electronics products should make their own evaluation to determine the suitability of each such product for the specific application.

© Copyright Tyco Electronics 2007