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BPEO Fibre Optic Closures

Protecting Your Fibre Connections

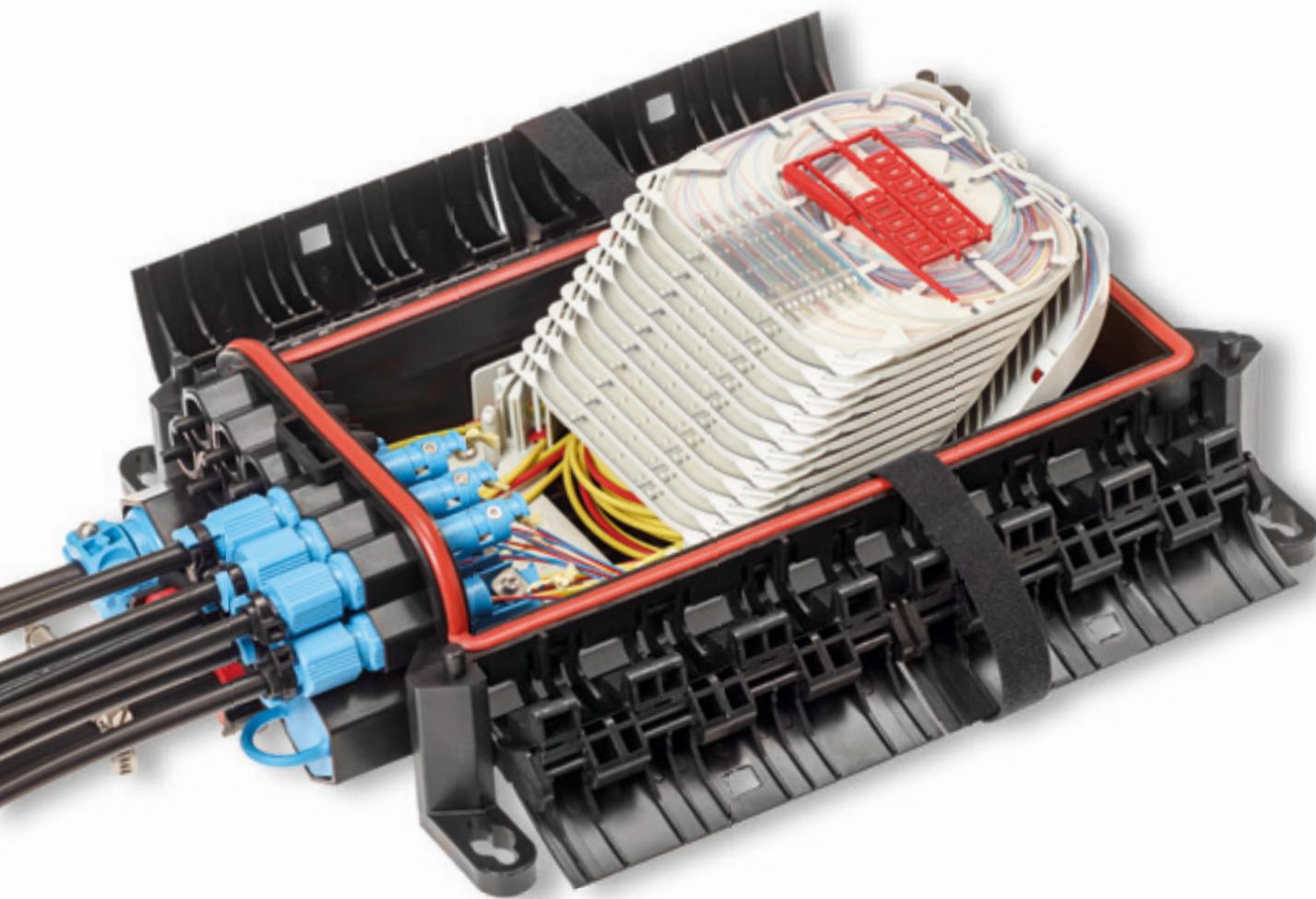
3M™ BPEO Evolution

The BPEO Evolution Concept

The BPEO Evolution product range concept is similar to the modular approach often used in copper connectivity modules and termination blocks.

The closures are delivered with a fibre organizer included with capacities of 4, 12, 28, 48 or 72 splice tray slots depending on the size of you require.

All closures are pressure tested for tightness at the end of the production line. All entry ports are sealed with blind plugs.



The splice trays are a standard size that take up one or two slots (5 mm or 10 mm spacing) of the organizer. These trays can be mixed and matched to suit your application resulting in a joint closure with great flexibility.

Coupled with the closures great flexibility the unique mechanical cable sealing ECAM kits are used to facilitate the entry of the cables into the closure providing a secure and weatherproof seal.

Additional splice trays and cable entry kits can be installed whenever new cables are added to the closure without the need for any special tooling. Wall brackets are also available as an accessory for fixing the closure securely in place.

Range Additions

Whilst retaining the original capabilities of the BPEO closures the Evolution range has been adapted to for use within FTTH deployments (PON and PtP networks) as well as for use within high fibre and city centre deployments.

In summary the BPEO product has evolved in 6 main areas:

Granular approach to suit FTTH deployments within the distribution network to meet the demands of density, frequency of intervention and easy use.

To meet the demand of the distribution of cables within dense housing networks the new BPEO Evolution range has been upgraded to meet the requirements of this multiple drop environment.

2 new closure sizes have been added to the range with the BPEO Size 0 with a 4 slot organizer and the BPEO 1,5 with a 12 slot organizer. The BPEO Sizes 0, 1 and 1,5 have been designed for multiple drop deployments with cable entries to manage 14 to 26 ports whilst still providing the facility for a mid span feeder cable.

A new fully mechanical Double Cable Entry is now available for fast and easy installation of un-cut “express” cables.

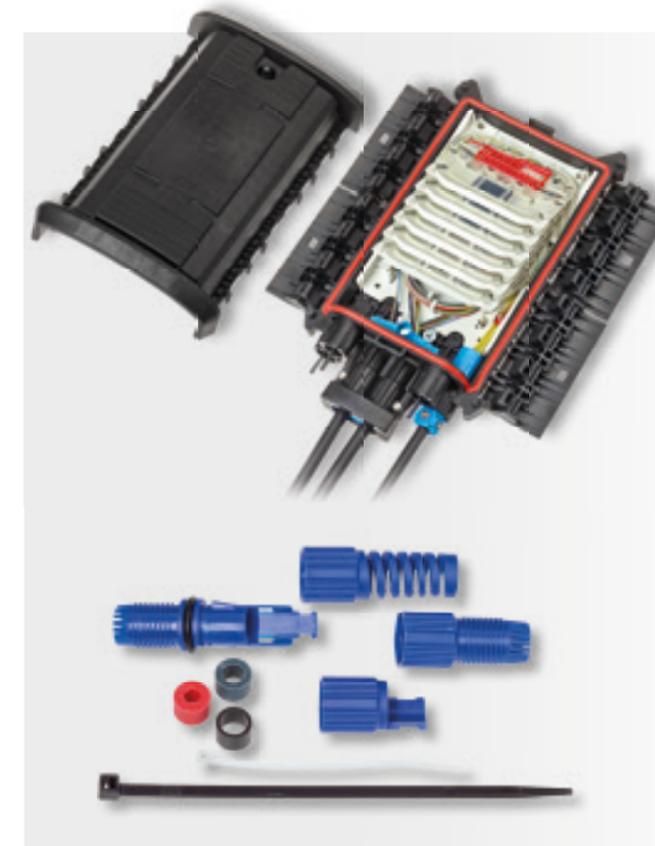
New splice trays have been added to the portfolio for single circuit management or splitter integration.

A very large splice capacity closure (BPEO S4) has been added to the range to manage high fibre count cables of 720 or 864 fibres used in PtP networks.

Integration into the civil infrastructure in terms of component sizes

The small size of the new BPEO Size 0 (volume less than 2 litres) and the BPEO Size 1,5 (volume less than 6 litres) coupled with their flat design make these closures ideal for installation within small spaces.

The deployment of FTTH networks within existing civil utilities such as ‘hand holes’ or ‘street furniture’ makes the BPEO an ideal choice.



The new organizers.

The new organizers contain all of the proven advantages of the early designs with additional features:

- A larger storage area for tubes, “microstructures” or for by-passing cables (un-cut fibres)
- The splice trays are structured in a tree style, allowing easy access to each splice tray
- Different splice trays can be installed on the same organizer, all splice trays are delivered with transparent covers
- Large cable guide channels on each side of the organizer allow the routing from any tray to any tray
- The marking of each splice tray is visible in the open or closed position

The new BPEO also has a fibre guide for 250 micron fibres from the cable entry to the splice trays. This means that each fibre can be individually routed, essential for FTTH installation or when using splitters.

Splice Trays

The different models of splice trays available within the BPEO range allow 2 types of circuit management:

- Single Circuit Management (SCM)
- Single Element Management (SEM)

Within these management systems the splice trays can accommodate various styles of splices:

- Heat shrink fusion splice protectors in single or double stacking
- Crimp type fusion splice protectors (ANT-Style).
- Fibrlok™ 2540-G mechanical splices in groups of 6 or 12.

The new trays portfolio has been designed to be able to manage individual PLC splitters 1:2, 1:4, 1:8, 1:16 or 1:32 within a single tray which provides the flexibility to install splitters on a ‘as required’ basis.

These trays have separate zones for both the splitter and for different splice types via an insert or directly.

Each splice tray can also be used for fibre storage in the shape of a figure 8, particularly useful with splitter deployment. A 5 mm SCM splice tray for 12 heat shrink fusion splices is available for applications with ITU G.657 fibre cables.



Fixing Supports

Depending on the environment and the size of the BPEO different fixing supports are available.

- BPEO Size 0 and BPEO Size 1,5 have fixing support directly moulded within the base of the closure
- BPEO Size 1, 2 and 3. For these closures wall mount fixing bars can directly be fixed to the back of the closures

The new fixing supports have a reduced thickness of 5 mm to gain the all important space inside manholes, handholes or existing street furniture. These same fixing supports can also be used to secure the closure in pole mount applications. A metal strap is required in addition to the bracket to complete a pole mount installation.



Easy opening and closing

The BPEO mechanical latch closing mechanism is quick and easy to open and close without the need for any specialized tooling or adjustments.

The built in seals of the BPEO in conjunction with the latch mechanism ensure that the seal remains watertight even after frequent use. The sealing gasket requires no maintenance or replacement even after several open/close operations.

ECAM cable entry sealing system

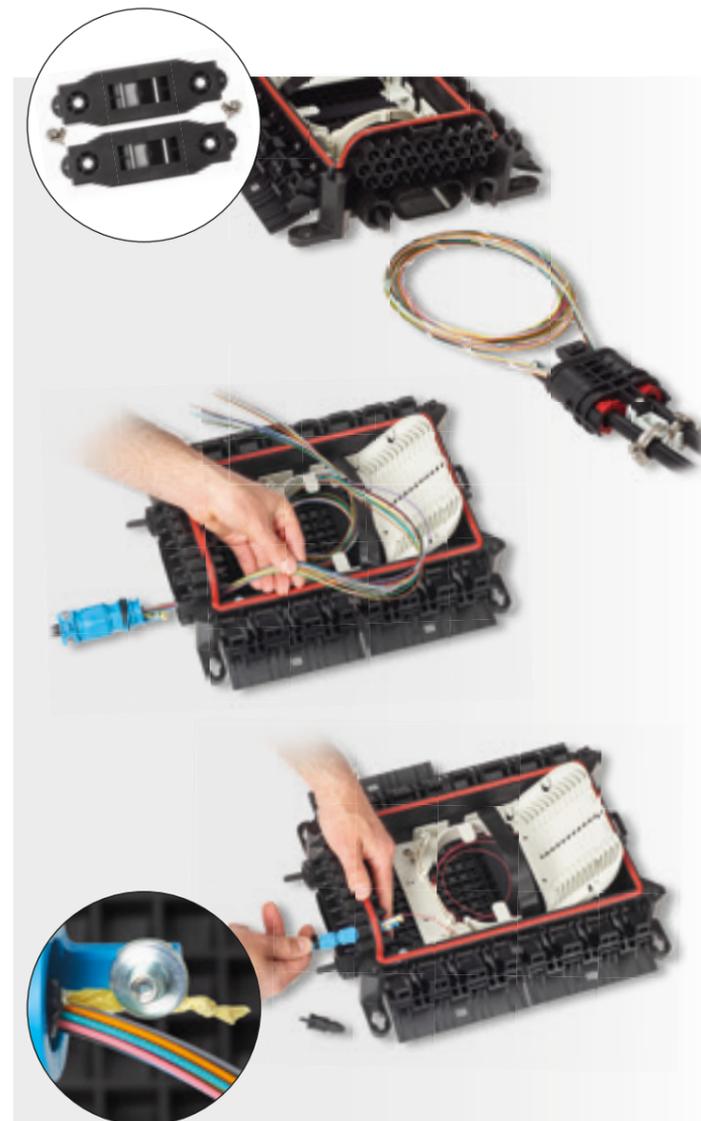
The ECAM cable entry system is a 100% mechanical system that does not require the use of heat or electrical power. No special tools are required to complete either the single cable or dual cable assemblies. A watertight cable entry can be obtained without any specific training.

The ECAM system has been designed to allow for the cables to be prepared and sealed before the cable is installed in the closure.

This feature avoids working on the cable inside the closure close to fibres that are already in use reducing the possibility of failures. It is also particularly useful when attaching the cables with strength members.

The intuitive design prevents the cables from being pulled out of the closure by attaching the ECAM system to both cable and strength member. A locking mechanism built into the ECAM ensures that it remains securely in place inside the closure. The watertight seal between the ECAM and BPEO closure is achieved with an ‘o’ ring built into the ECAM assembly.

It always remains possible to replace or change a cable at any time with the ECAM system.



3M™ BPEO Size 0

3M™ BPEO Size 0 up to 4 trays Distribution Point

The new BPEO Size 0 closure has been specifically designed for FTTH Customer Connections.

Due to its small size (less than 2 litres) it is ideally suited for use within all types of manholes, even the smallest ones. The butt configuration of the BPEO S0 facilitates the use within narrow manholes.

With 14 outputs, 2 dedicated to the branching of cables, the BPEO S0 allows to cover the entire application scenarios according to the area topology (residential, mix, building).

BPEO Size 0 can also be used within additional FTTH distribution applications for example, aerial mounted on a pole, façade networks or in areas with critical environmental conditions.

Specifications

General
 Sealing: 80 mbar continuous and 200 mbar flash test (IP68)
 Impact test: 20 joule, IK10
 Pull Force: Drop = 10 daN
 Feeder = 100 daN

Dimensions overall (in mm)

Length	240
Width	230
Depth	90

Entry configurations

Mid span entry (uncut)		yes
Storage	microstructure	yes
	loose tube 3 mm	limited, dep. on cable used

Capacity

Embedded organizer max. No. of splice trays	Fusion splices 5 mm Cassettes-1slot-12 splices	Fibrlok™ 2540-G mechanical splices 5 mm Cassette-1slot-6 splices
4	48	24

Connections to individual customers can be achieved on an 'as required basis', without specific tooling thanks to the BPEO range of ECAM mechanical cable entries. The ECAM have the proven benefit of improved operational conditions based on external preparation of the cable seal away from the closure assembly.

All BPEO closures are delivered with integrated valve to enable a tightning test in the field.



3M™ BPEO Size 0

Cable Entry Configurations BPEO Size 0



BPEO Evolution Size 0 is equipped with different size cable entry ports depending on the size of cables to be used. The description of the cable entry kits (ECAM) indicates the diameter of the cables which can be accommodated within each ECAM and within the closure port in the base.

Single Entry ECAM's are pre-fixed with the letter 'S' followed by an indication for the maximum diameter of cable.

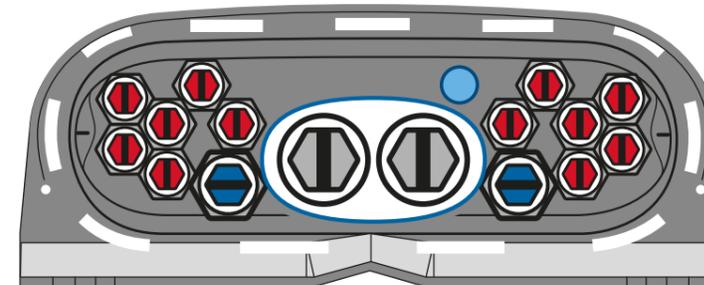
example = ECAM S7 – entry for one cable, diameter 3-7 mm

Uncut Cable Entry ECAM's are pre-fixed with the letter 'D' followed by an indication for the maximum diameter of cable.

example = ECAM D18 – double entry for uncut cable, diameter 6 - 18 mm

Any dual entry port can be used for uncut cables with double ECAM Kits or for 2 single ECAM Kits (next smaller size) if no uncut cable enters the closure.

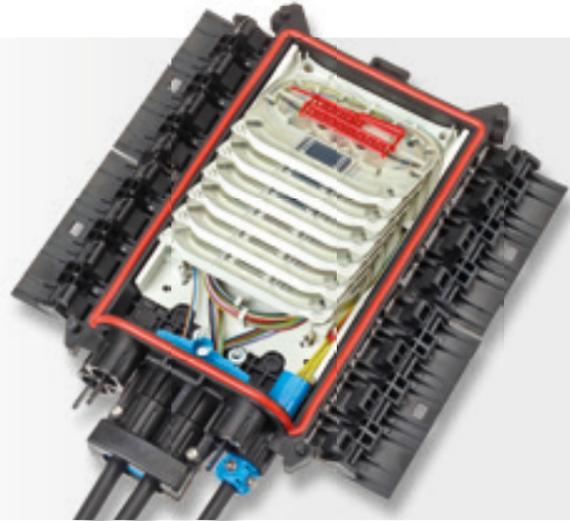
-  Single port for ECAM S7 (3 - 7 mm cable Ø)
-  Single port for ECAM S9,5 (3,5 - 9,5 mm cable Ø)
-  Dual port for ECAM D18 (6 - 18 mm cable Ø)
-  Port for Air Valve



- 1 dual port for double ECAM D18, 2 single ports S9,5 and 12 single ports for ECAM S7 or
- 1 dual port for 2 single ECAM S12, 2 single ports S9,5 and 12 single ports for ECAM S7

3M™ BPEO Size 1

The BPEO Size 1 organizer can be equipped with up to 12 splice trays if the closure is being used with standard micro structure cables in mid span applications. Alternatively if loose tube cables are to be used in a mid span application then the splice tray capacity is reduced to 8 trays.



The maximum capacity of the organizer is 72 mechanical Fibrlok™ splices or 144 fusion splices located within 12 trays.

Standard product

The BPEO Size 1 is supplied equipped with the 12 slot organizer, tube structure clamps and installation tool and an inter splice tray fibre bridge guide. The fibre bridge guide is used to route individual output or unused fibres from one splice tray into the tray input of another splice tray in the organizer.

Each Size 1 closure is supplied complete with blanking plugs for each port either single or double depending on the port configuration selected. Every BPEO Size 1 closure is 100%, 500 mbar pressure flash tested prior to delivery.

Parts required to be ordered separately

- Splice trays
- Cable entries – ECAM's
- Fixing supports

Specifications

General

Sealing: 80 mbar continuous and 500 mbar flash test (IP68)
 Impact test: 20 joule, IK10
 Pull Force: 100 daN

Dimensions overall (in mm)

Closure body	With wallmount bracket	With Pole mount bracket	With Pole/Wall mount bracket
Length	382	382	382
Width	204	310	230
Depth	92	97	122

Entry configurations

	EOC	CDP	EDP	FDP
Mid span entry (uncut)	no	yes	yes	yes
Storage of: Loose tube 3 mm / microstructure cable	yes yes	yes yes	yes yes	yes yes

Capacity

Capacity depends directly on the volume of stored/unused fibres/tubes

Closure size	No. of Splice trays	Fusion splices in 10 mm tray (2 slots)	Fusion splices in 5 mm tray (1 slot)	Fibrlok™ 2540-G (6ea in 5 mm tray / 12ea in 10 mm tray)
Microstructure	12	144	144	72
Loose tubes 3 mm	8	96	96	48



3M™ BPEO Size 1

Cable Entry Configurations BPEO Size 1

The BPEO Evolution Size 1 is available in different models depending on the application in which they are to be used. These different models feature various combinations of the type and size of cable entries to suit network requirements.

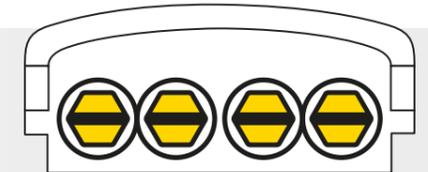
The cable entry kits (ECAM) used within the BPEO Evolution range are available in various sizes to suit a range of cable diameters and whether they are to be used for single cables or for uncut (express) cable. For example the ECAM Evol **S18** covers cable diameters between 5 and 18 mm and the ECAM Evol **D20** is a double entry sealing kit for uncut (express) cables between 5 and 20 mm diameter.

Any dual entry port can be used for uncut cables with double ECAM Kits or for 2 single ECAM Kits (next smaller size) if no uncut cable enters the closure.

-  Single port for ECAM **S18** (5 - 18 mm cable Ø)
-  Single port for ECAM **S12** (4-12 mm cable Ø)
-  Dual port for ECAM **D20** (5 - 20 mm cable Ø)
-  Single port for ECAM **S7** (3 - 7 mm cable Ø)
-  Single port for ECAM **S9,5** (3,5 - 9,5 mm cable Ø)
-  Dual port for ECAM **D18** (6 - 18 mm cable Ø)

EOC

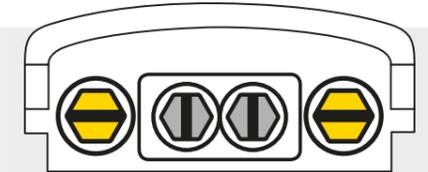
Straight Joint (End Of Cable) Four single entries ECAM **S18**



CDP (Cable Distribution Point)

Two possible configurations

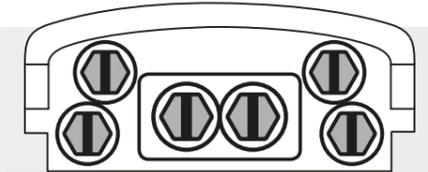
- 1 dual port for double ECAM **D20** and 2 single ports for ECAM **S18** or
- 1 dual port for 2 ECAM **S12** and 2 single ports for ECAM **S18**



EDP (End Distribution Point)

Two possible configurations

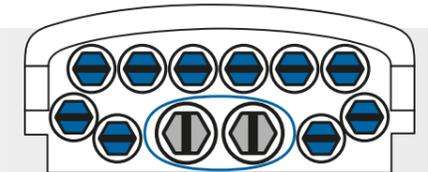
- 1 dual port for ECAM **D20** and 4 single ports for ECAM **S12** or
- 1 dual port for 2 ECAM **S12** and 4 single ports for ECAM **S12**



FDP BRANCH (Fibre Distribution Point for Branch cables)

Two possible configurations

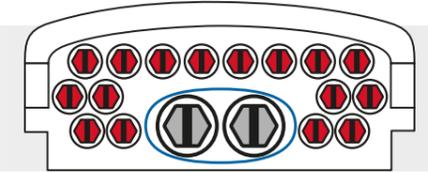
- 1 dual port for ECAM **D18** and 10 single ports for ECAM **S9,5** or
- 1 dual port for 2 ECAM **S12** and 10 single ports for ECAM **S9,5**



FDP DROP (Fibre Distribution Point for Drop cables)

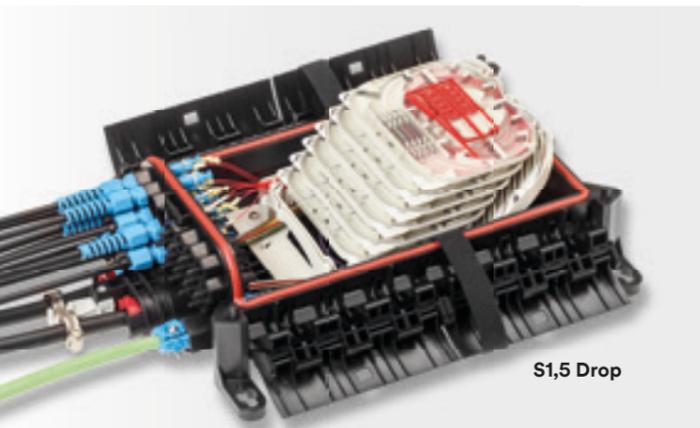
Two possible configurations

- 1 dual port for ECAM **D18** and 16 single ports for ECAM **S7** or
- 1 dual port for 2 ECAM **S12** and 16 ports for single ECAM **S7**





S1,5 Branch



S1,5 Drop

3M™ BPEO Size 1,5

In order to deliver the new FTTH distribution networks engineering, 3M™ has enlarged its portfolio to include a BPEO Size 1,5 which is less than 6 litres in volume. The BPEO Size 1,5 is equipped with a new organizer that allows for the management of loose tubes mid span feeder cables whilst still remaining the capacity for 144 fusion splices.

Two front sides are available:

- **Distribution Hub**

The solution is capable of connecting up to 13 cables with an outside diameter up to 9,5 mm, 2 branch cables with an outside diameter up to 18 mm and 1 uncut cable with an outside diameter of up to 18 mm.

- **Distribution Point**

The solution is capable of connecting up to 25 drop cables with an outside diameter up to 7 mm, 2 branch cables with an outside diameter up to 12 mm and 1 uncut cable with an outside diameter of up to 18 mm.



Specifications

General

Sealing: 80 mbar continuous and 500 mbar flash test (IP68)
 Impact test: 20 joule, IK10
 Pull Force: Drop = 10 daN
 Feeder = 100 daN

Dimensions overall (in mm)

	Closure incl. wall mount ears
Length	382
Width	204
Depth	120

Capacity

Capacity depends directly on the volume of stored/unused fibres/tubes

	Max. number of Splice trays	Fusion splices in 10 mm tray (2 slots)	Fusion splices in 5 mm tray (1 slot)	Fibrlok™ 2540-G (6ea in 5 mm tray / 12ea in 10 mm tray)
Microstructure	12	144	144	72
Loose tubes 3 mm	12	144	144	72

Entry configurations

	FDP Drop	FDP Branch
Mid span entry (uncut)	yes	yes
Storage of: Loose tube 3 mm / microstructure cable	yes yes	yes yes

3M™ BPEO Size 1,5

Cable Entry Configurations BPEO Size 1,5

BPEO Evolution Size 1,5 is equipped with different size cable entry ports depending on the size of cables to be used. The description of the cable entry kits (ECAM) indicates the diameter of the cables which can be accommodated within each ECAM and within the closure base.

Single Entry ECAM's are pre-fixed with the letter 'S' followed by an indication for the maximum diameter of cable.

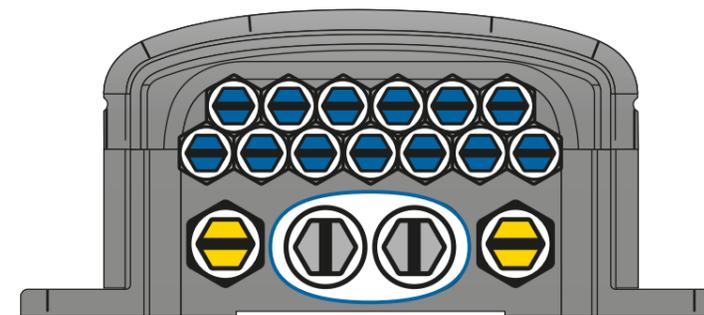
example = ECAM S7 – entry for one cable, diameter 3 - 7 mm

Uncut Cable Entry ECAM's are pre-fixed with the letter 'D' followed by an indication for the maximum diameter of cable.

example = ECAM D18 – double entry for uncut cable, diameter 6 - 18 mm

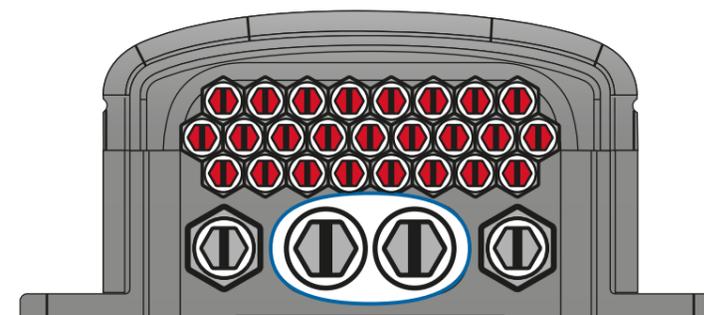
Any dual entry port can be used for uncut cables with double ECAM Kits or for 2 single ECAM Kits (next smaller size) if no uncut cable enters the closure.

-  Single port for ECAM S7 (3 - 7 mm cable Ø)
-  Single port for ECAM S9,5 (3,5 - 9,5 mm cable Ø)
-  Single port for ECAM S12 (4-12 mm cable Ø)
-  Single port for ECAM S18 (5 - 18 mm cable Ø)
-  Dual port for ECAM D18 (6 - 18 mm cable Ø)



FDP BRANCH
(Fibre Distribution Hub for Branch cables)

- Two possible configurations
- 1 dual port for double ECAM D18 and 2 single ports for ECAM S18 and 13 single ports for ECAM S9,5 or
 - 1 dual port for 2 single ECAM S12 and 2 single ports for ECAM S18 and 13 single ports for ECAM S9,5



FDP DROP
(Fibre Distribution Point for Drop cables)

- Two possible configurations
- 1 dual port for double ECAM D18 and 2 single ports for ECAM S12 and 25 single ports for ECAM S7 or
 - 1 dual port for 2 single ECAM S12 and 2 single ports for ECAM S12 and 25 single ports for ECAM S7

3M™ BPEO Size 2 and 3

Standard closures delivered with:

- The closure body with attached latches and cover with pressure valve
- Port blanking plugs in all cable entry ports including the double entry port

- The fibre management organizer mounted inside of the closure without any splice trays
- Accessories to fix and route micro tubes or loose tubes as well as 250 µm fibre which can be stored in the bottom zone of the organizer

Additional parts to be ordered separately

- Splice trays according to splice type to be used
- ECAM cable entry sealing kits according to the number and diameter of cables to be installed
- Wall- or pole mount mounting brackets

BPEO Evolution Size 2 and Size 3 closures are high volume closures designed for use within the trunk and feeder segment of a fibre network. The organizer in a BPEO Size 2 closure can accommodate up to 28 splice trays (5 mm), with a maximum capacity of 168 Fibrlok™ mechanical splices or 336 fusion splices. The BPEO Size 3 organizer contains 48 fixing positions for splice trays (5 mm) with maximum capacity of 288 Fibrlok™ mechanical splices or 576 fusion splices. Both closure sizes are watertight and can withstand 80 mbar of permanent pressure for applications in all environments and mounting locations either buried, within a manhole, on the wall or on a pole.



Specifications of the different possible configurations

General

Sealing: 80 mbar continuous and 500 mbar flash test (IP68)
 Impact test: 20 joule, IK10
 Pull Force: 100 daN

Dimensions overall (in mm)

Size	Length	Width	Depth closure body	Depth with wall support	Depth with pole/wall support	Depth sewage
2	520	341	149	154	178	149
3	661	341	149	154	178	149

Entry configurations

	CDP	EDP	FDP
Mid span entry (uncut)	yes	yes	yes
Storage of: Loose tube 3 mm / microstructure cable	yes	yes	yes

Capacity

Closure size	Max. number of splice trays	Fusion splices in 10 mm tray (2 slots)	Fusion splices in 5 mm tray (1 slot)	Fibrlok™ 2540-G (6ea in 5 mm tray / 12ea in 10 mm tray)
BPEO Size 2	28	168	336	168
BPEO Size 3	48	288	576	288

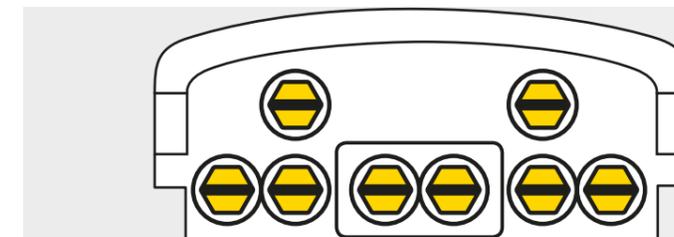
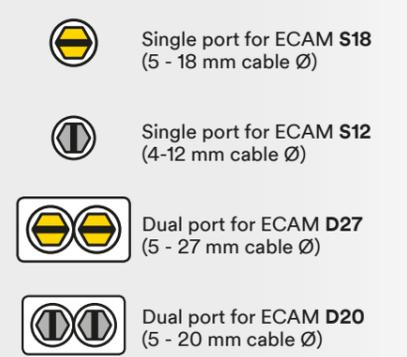
3M™ BPEO Size 2 and 3 Cable Entry Configurations

BPEO Evolution Size 2 and 3 closures are equipped with identical cable entry port configurations, are the same height but have different lengths and splice capacities.

Depending on the application and the cable diameters, three different entry port configurations are available with a combination of the following ECAM kits:

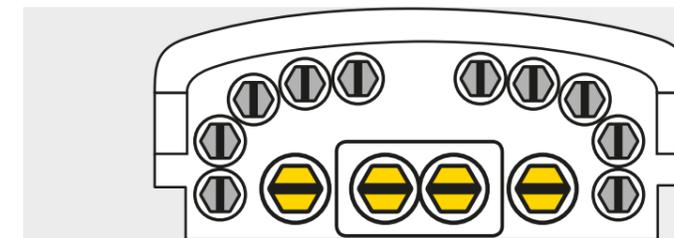
- ECAM S12 for cable diameters between 4 and 12mm
- ECAM S18 for cable diameters between 5 and 18 mm
- ECAM D20 for cable diameters between 5 and 20 mm
- ECAM D27 for cable diameters between 5 and 27 mm

Any dual entry port can be used for uncut cables with double ECAM Kits or for 2 single ECAM Kits (next smaller size) if no uncut cable enters the closure.



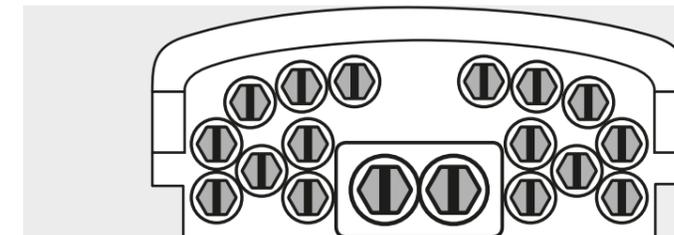
CDP (Cable Distribution Point)
 (Fibre Distribution Hub for Branch cables)
 Two possible configurations

- 1 dual port for double ECAM D27 and 6 single ports for ECAM S18
- or
- 1 dual port for 2 single ECAM S18 and 6 single ports for ECAM S18



EDP (End Distribution Point)
 (Fibre Distribution Hub for Branch cables)
 Two possible configurations

- 1 dual port for double ECAM D27 and 2 single ports for ECAM S18 and 10 single ports for ECAM S12
- or
- 1 dual port for 2 single ECAM S18 and 2 single ports for ECAM S18 and 10 single ports for ECAM S12



BDP (Branch Distribution Point)
 (Fibre Distribution Hub for Branch cables)
 Two possible configurations

- 1 dual port for double ECAM D20 and 16 single ports for ECAM S12
- or
- 1 dual port for 2 single ECAM S12 and 16 single ports for ECAM S12

3M™ BPEO Size 4

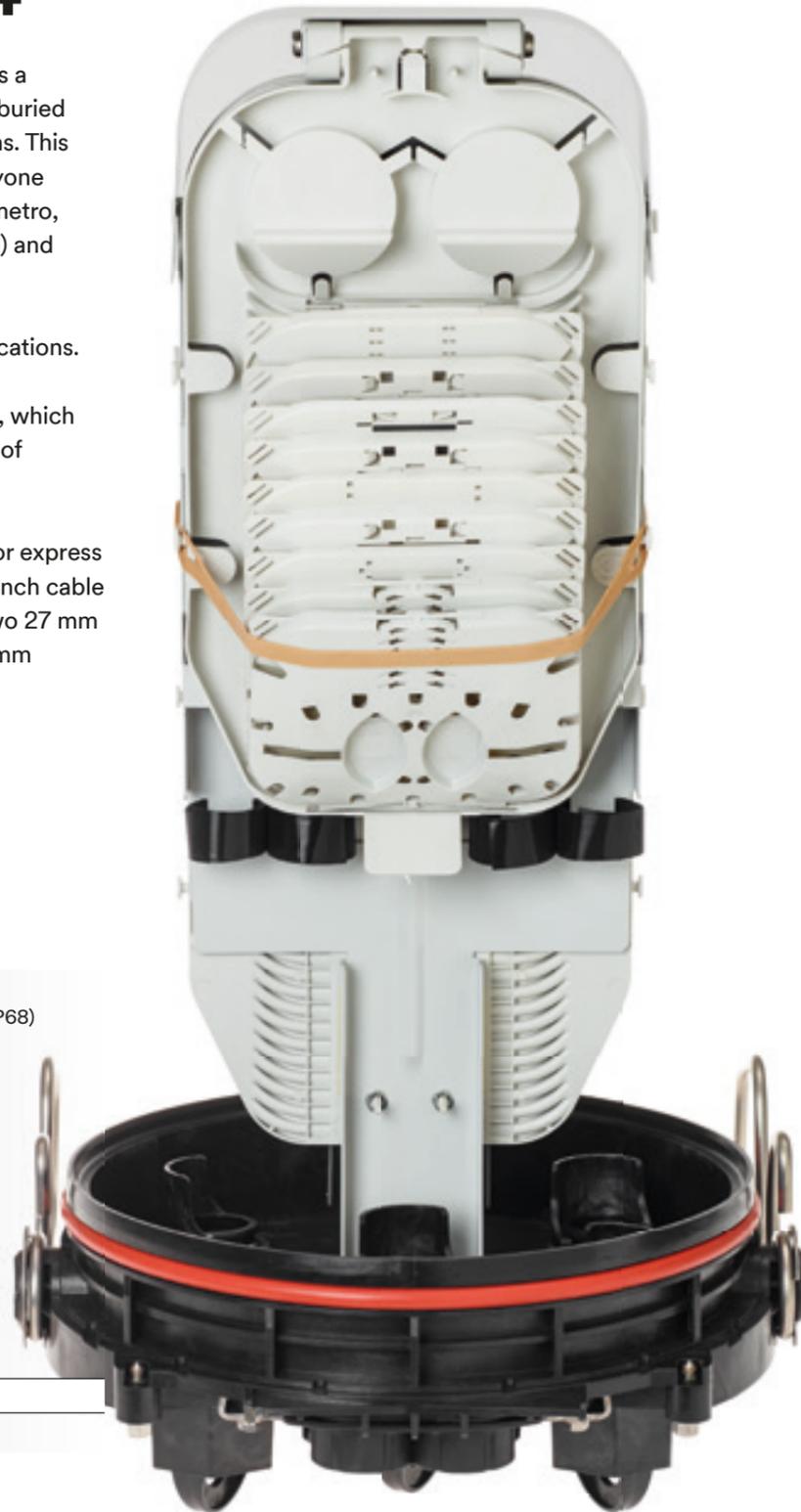
The new 3M™ Fibre Dome Closure BPEO Size 4 is a hermetically sealed fibre dome closure for aerial, buried above-grade, and buried below-grade applications. This closure is designed to meet the needs of most anyone using fibre optic splice closures in the long haul, metro, local access (DSL, HFC, mobile wireless backhaul) and FTTP feeder and distribution networks.

It is designed for butt, and single fibre cable applications.

The BPEO Size 4 closure requires no special tools, which can help reduce tooling costs and allows for ease of installation and re-entry into the closure.

The BPEO Size 4 is equipped with one oval port for express or mid-span cable applications and five round branch cable ports. The oval main cable port accommodates two 27 mm and the round cable ports accommodate one 27 mm all-dielectric or armoured cables.

The splice capacity is 864 single fusion.



Specifications

General
 Sealing: 80 mbar continuous and 280 mbar flash test (IP68)
 Impact test: Compliant to GR-771 5.3.7
 Pull Force: 100 daN

Dimension Overall
 L x H (dia.) = 658 mm x 335 mm

Entry configurations

Mid span entry	yes
Storage of: Loose tube 3 mm / microstructure cable	yes / yes

Capacity

Microstructure / loose tubes	72 trays 5 mm (1 slot)
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3M™ BPEO Size 4

Cable Entry Configurations BPEO Size 4

BPEO S4 Evolution is equipped with different size cable entry ports depending on the size of cables to be used. The description of the cable entry kits (ECAM) indicates the diameter of the cables which can be accommodated within each ECAM and within the closure base.

Single Entry ECAM's are pre-fixed with the letter 'S' followed by an indication for the maximum diameter of cable.

example = ECAM S27 – entry for one cable, diameter 4 - 27 mm

Uncut Cable Entry ECAM's are pre-fixed with the letter 'D' followed by an indication for the maximum diameter of cable.

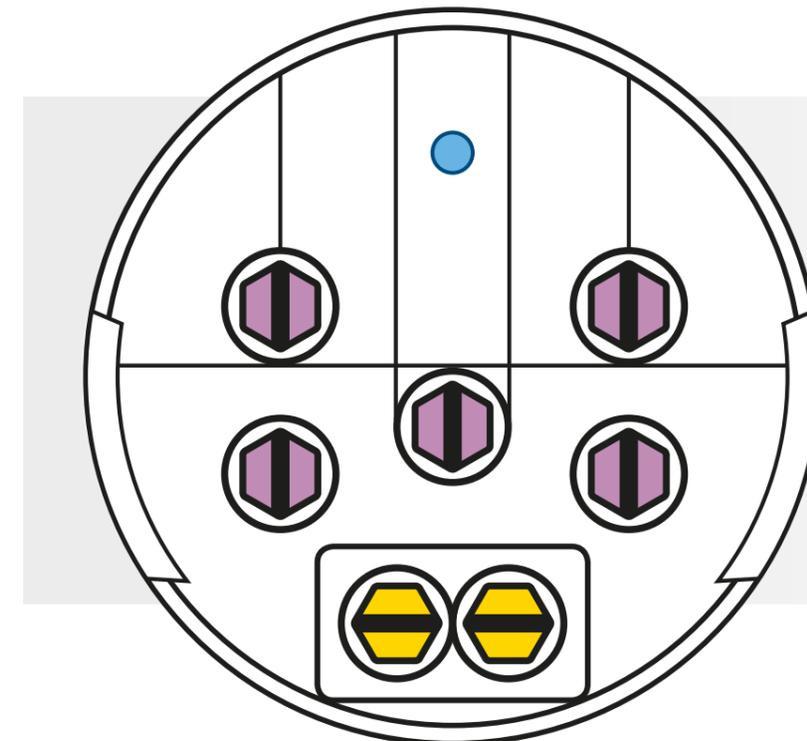
example = ECAM D27 double entry for uncut cable, diameter 5 - 27 mm

The dual entry port can be used for uncut cables with double ECAM Kits or for 2 single ECAM Kits (next smaller size) if no uncut cable enters the closure.

 Single port for ECAM S27 (5 - 27 mm cable Ø)

 Dual port for ECAM D27 (5 - 27 mm cable Ø)

 Port for Air Valve



FDC 12
 (Fibre Distribution Hub for Branch cables)
 Two possible configurations

- 1 dual port for double ECAM D27 and 5 single ports for ECAM S27 or
- 1 dual port for 2 single ECAM S18 and 5 single ports for ECAM S27

Selection Guide – Standard Models

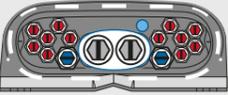
The closure bodies

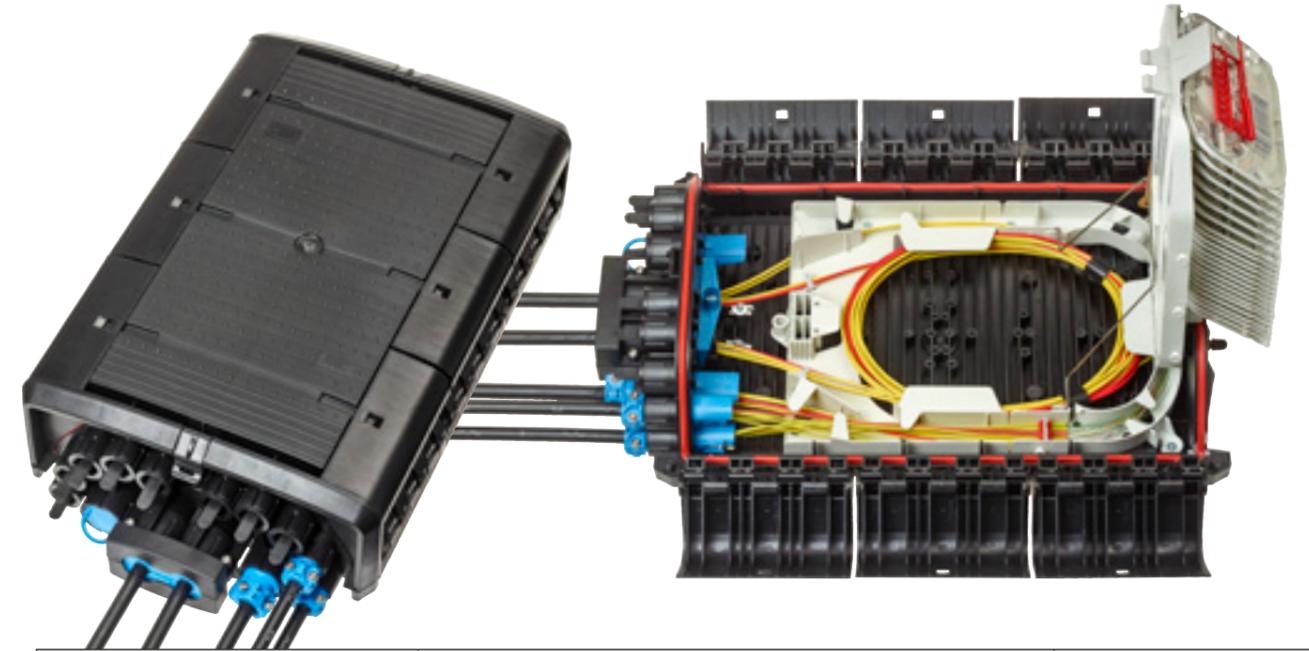
Delivery content

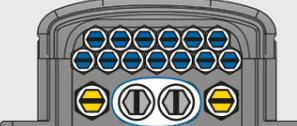
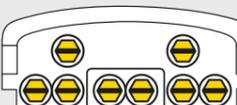
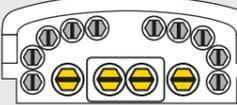
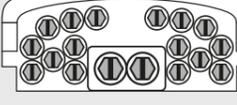
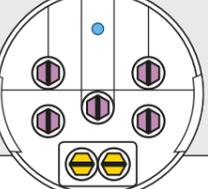
All BPEO closures Size 0, 1, 1,5, 2, 3 and 4 are delivered with:

- Closure body, cover with valve (for water tightness test)
- Dummy plugs on all cable entry ports
- Installed organizer complete with storage area for microstructure or loose tube (3 mm) cables
- Instructions, fixing dimensions drawing

Splice trays, fixing brackets and ECAM cable entry seals are to be ordered separately!

Type	Description	Reference Number
	Fibre Distribution Point BPEO S0 4 slots Size 0, organizer for 4 splice trays (max.)	N501741A
	Fibre Distribution Point, Drops BPEO S1 12 slots Size 1, organizer for 12 splice trays (max.)	N501714A
	Fibre Distribution Point, Branch BPEO S1 12 slots Size 1, organizer for 12 splice trays (max.)	N501719A
	End of cable BPEO S1 Evol EOC 12 Slots Size 1, organizer for 12 splice trays (max.)	N501487A
	Cable Distribution Point BPEO S1 Evol CDP 12 Slots Size 1, organizer for 12 splice trays (max.)	N501488A
	End Distribution Point BPEO S1 Evol EDP 12 slots Size 1, organizer for 12 splice trays (max.)	N501489A



Type	Description	Reference Number
	Fibre Distribution Hub, Branch BPEO S1,5 12 slots Size 1,5, organizer for 12 splice trays (max.)	N501747A
	Fibre Distribution Point, Drops BPEO S1,5 12 slots Size 1,5, organizer for 12 splice trays (max.)	N501751A
	Cable Distribution point BPEO S2 Evol CDP 28 Slots Size 2, organizer for 28 splice trays (max.)	N501491A
	Cable Distribution point BPEO S3 Evol CDP 48 Slots Size 3, organizer for 48 splice trays (max.)	N501494A
	End Distribution point BPEO S2 Evol EDP 28 Slots Size 2, organizer for 28 splice trays (max.)	N501492A
	End Distribution point BPEO S3 Evol EDP 48 Slots Size 3, organizer for 48 splice trays (max.)	N501495A
	Branch Distribution point BPEO S2 Evol BDP 28 Slots Size 2, organizer for 28 splice trays (max.)	N501493A
	End Distribution point BPEO S3 Evol BDP 48 Slots Size 3, organizer for 48 splice trays (max.)	N501496A
	Fibre Dome BPEO S4 Evol 72 slots Organizer for 72 splice trays (max.)	N711675A

Splice Trays

The type and number of splice trays required needs to be selected according to the type of splice technology used (e.g. fusion or mechanical) and if PLC splitters are required.

For example

Splice tray for 12 heat shrink fusion splice protectors – 1 slot

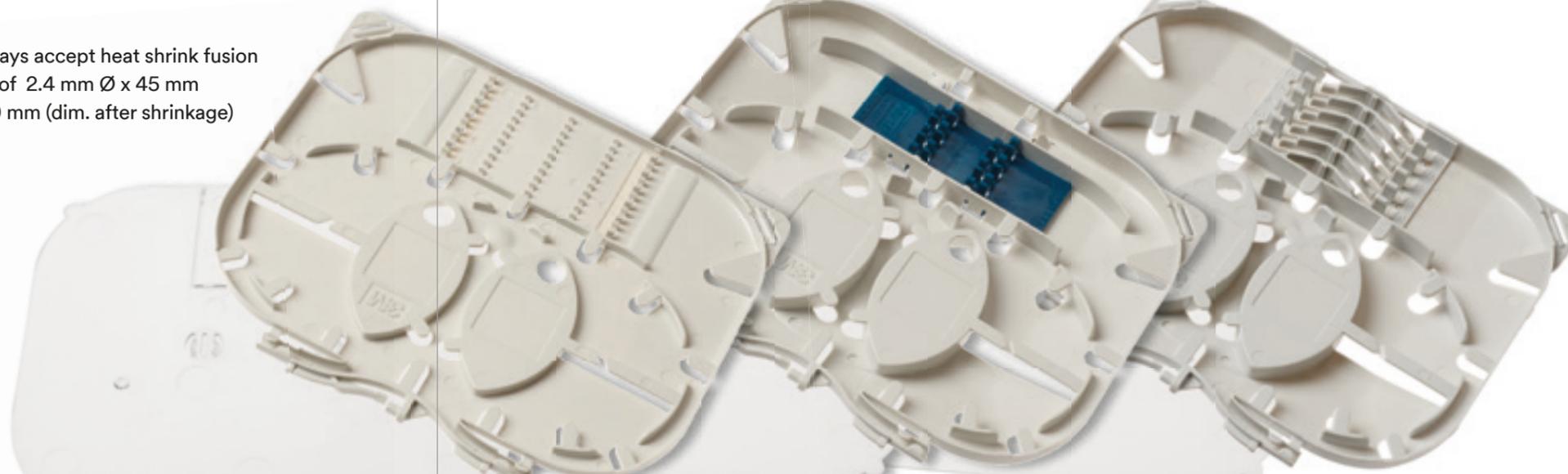
One organizer slot represents 5 mm. A 5 mm cassette needs 1 slot. A 10 mm cassette requires the space of 2 slots.

1 Organizer slot (1PAS) = 1 tray of 5 mm

2 Organizer slots (2PAS) = 1 tray of 10 mm

The selection of the type and number of trays will define the capacity of the closure.

All BPEO splice trays accept heat shrink fusion splice protectors of 2.4 mm Ø x 45 mm or 2,4 mm Ø x 60 mm (dim. after shrinkage)



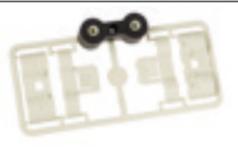
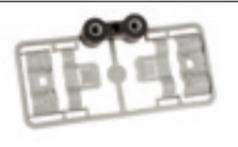
Type	Description	Reference Number
	BPEO K7 1PAS-12 fusion Compatible with 12ea heat shrink fusion splice protectors (2,4 x 45 mm) Splice tray is supplied with transparent cover	N541106A
	BPEO K7 1PAS for 6 Fibrlok™ 2540-G Compatible with 6ea mechanical splice Fibrlok™ 4 x 4 ref. 2540-G Splice tray is supplied with a transparent cover	N541103A
	BPEO K7 1 PAS + 12 ANT-S Compatible with 12ea crimp splice protectors Splice tray is supplied with transparent cover	N541114A
	BPEO K7 1 PAS SCM 2 x 6 Fusion (for ITU. G.657 fibre only) Compatible with 2 x 6ea heat shrink fusion splice protectors Splice tray is supplied with transparent cover	N541182A
	BPEO K7 1 PAS 9 Fusion + splitter Compatible with 9ea heat shrink fusion splice protectors plus 1ea 1:2 PLC splitter Splice tray is supplied with transparent cover	N541113A
	BPEO- K7 1 PAS 2 Splitter 1 x 2 + 6 fusion Compatible with 6ea heat shrink fusion splice protectors plus 2ea 1:2 PLC splitters Splice tray is supplied with transparent cover	N541155A

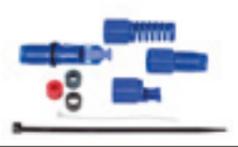
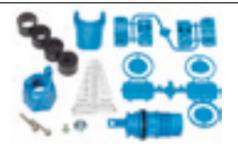
Type	Description	Reference Number
	BPEO K7 2 PAS 12 Fusion and PLC Splitter Compatible with 12ea heat shrink fusion splice protectors 2,4 x 45 or 2,4 x 60 mm plus 1ea PLC splitter 70 x 10 x 6 mm Splice tray is supplied with transparent cover	N541104A
	BPEO K7 2 PAS 12 Fibrlok™ 2540-G Compatible with 12ea Fibrlok™ mechanical splice 2540-G Splice tray is supplied with transparent cover	N541108A
	BPEO K7 2 PAS Universal Splice Tray Compatible with 12ea Fibrlok™ mechanical splice 2540-G or with 12ea heat shrink fusion splice protectors (2,4 x 45 mm) Splice tray is supplied with transparent cover	N541121A
	BPEO K7 2 PAS 24 Fusion Compatible with 24ea heat shrink fusion splice protectors Splice tray is supplied with transparent cover	N541182A
	BPEO K7 2 PAS 10 Fibrlok™ and PLC Splitter Compatible with 10ea Fibrlok™ mechanical splices in splice holder and 1ea PLC splitter 70 x 10 x 6 mm Splice tray is supplied with transparent cover	N541110A

Cable Entry Sealing Kits

Mechanical cable entry sealing kits for Single ports or Double ports (for uncut cable).

The kits are supplied complete with assembly tool. Holders and anchors are supplied with the closure.

Type	Description	Quantity	Reference Number
Double cable entry sealing for uncut cables			
	ECAM D18 Main Body for cables from 6 - 18 mm diameter	Box of 10 pcs	N721162A
	ECAM D18 Main Body for cables from 4 - 6 mm diameter	Box of 10 pcs	N721162B
	ECAM D18 Double entry cable sealing kit for cables from 4 - 6 mm diameter	Box of 10 pcs	N721176A
	ECAM D18 Double entry cable sealing kit for cables from 6 - 9 mm diameter	Box of 10 pcs	N721163A
	ECAM D18 Double entry cable sealing kit for cables from 9 - 12 mm diameter	Box of 10 pcs	N721164A
	ECAM D18 Double entry cable sealing kit for cables from 12 - 15 mm diameter	Box of 10 pcs	N721165A
	ECAM D18 Double entry cable sealing kit for cables from 15 - 18 mm diameter	Box of 10 pcs	N721166A
	ECAM D20 Evol Double entry cable sealing for cables from 5 - 20 mm diameter	Individual Packaging	N721130A
	ECAM D27 Double entry cable sealing for cables from 5 - 27 mm diameter	Individual Packaging	N721131A
	ECAM D27 Evol Double entry cable sealing for cables from 5 - 27 mm diameter	Individual Packaging	80611329527

Type	Description	Quantity	Reference Number
Single cable entry sealing			
	ECAM S7 Single entry cable sealing for cables from 3 - 7 mm diameter	Box of 100 pcs	N721136A
	ECAM S9,5 Single entry cable sealing for cables from 3,5 - 9,5 mm diameter	Box of 60 pcs	N721144A
	ECAM S12 Evol Single entry cable sealing for cables from 4 - 12 mm diameter	Individual Packaging Box of 40 pcs	N530128A N530208A
	ECAM S18 Evol Single entry cable sealing for cables from 5 - 18 mm diameter	Individual Packaging Box of 20 pcs	N530129A N530209A
	ECAM S27 Evol Single entry cable sealing for cables from 5 - 27 mm diameter	Individual Packaging	80611329493

Fixing Supports

Type	Description	Quantity	Reference Number
	Wall/Pole Plastic Bracket BPEO S1 (not compatible with grounding kit)	1 Pair	N711599A
	Wall/Pole Plastic Bracket BPEO S2/3 (not compatible with grounding kit)	1 Pair	N711600A
	Wall/Pole Metal Bracket BPEO S1 (compatible with grounding kit)	1 Pair	N711438A
	Wall/Pole Metal Bracket BPEO S2/3 (compatible with grounding kit)	1 Pair	N711440A
	Wallmount Metal Bracket BPEO S4 Evol		N711660A
	BPEO Grounding Kit Set 4 Cables	1 Kit	N151064A

Configuration table of Closure Type BPEO S0, S1, S1,5, S2, S3, S4

Short ID of BPEO Closures	BPEO Closure Type	Short ID of Cable Entries	Number of cable entries (max.)	Compatible Cable Entries	Compatible Splice Trays	Number of Splice Trays (max.)	Wall- or Polemount Bracket Short ID
501716	BPEO Evol S0 4 SLOTS	721162	1	Body Double ECAM D18 – (from 6 to 18 mm)	All cassette types	4 x cassettes 1 Slot 2 x cassettes 2 Slots	Support integrated in the closure body (Wall / Pole)
		721176	-	Cable Entry Kit for D18 – (from 4 to 6 mm)			
		721163	-	Cable Entry Kit for D18 – (from 6 to 9 mm)			
		721164	-	Cable Entry Kit for D18 – (from 9 to 12 mm)			
		721165	-	Cable Entry Kit for D18 – (from 12 to 15 mm)			
		721166	-	Cable Entry Kit for D18 – (from 15 to 18 mm)			
530187	12	Single ECAM S7 – (from 3 to 7 mm)					
721144	2	Single ECAM S9,5 – (from 3,5 to 9,5 mm)					
501487	BPEO S1 Evol EOC 12 SLOTS	530129	4	Single ECAM Evol S18 – (from 5 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
501488	BPEO S1 Evol CDP 12 SLOTS	721130 530129	1 2	Double ECAM D20 – (from 5 to 20 mm) Single ECAM S18 – (from 5 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
501489	BPEO S1 Evol EDP 12 SLOTS	721130 530128	1 4	Double ECAM D20 – (from 5 to 20 mm) Single ECAM S12 – (from 4 to 12 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
501715	BPEO S1 Evol EDP DROP 12 SLOTS	721130 530187 721144	1 8 2	Double ECAM D20 – (from 5 to 20 mm) Single ECAM S7 – (from 3 to 7 mm) Single ECAM S9,5 – (from 3,5 to 9,5 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
501719	BPEO S1 Evol FDP BRANCH 12 SLOTS	721162	1	Body Double ECAM D18 – (from 6 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
		721176	-	Cable Entry Kit for D18 – (from 4 to 6 mm)			
		721163	-	Cable Entry Kit for D18 – (from 6 to 9 mm)			
		721164	-	Cable Entry Kit for D18 – (from 9 to 12 mm)			
		721165	-	Cable Entry Kit for D18 – (from 12 to 15 mm)			
		721166	-	Cable Entry Kit for D18 – (from 15 to 18 mm)			
721144	10	Single ECAM S9,5 – (from 3,5 to 9,5 mm)					
501714	BPEO S1 Evol FDP DROP 12 SLOTS	721162	1	Body Double ECAM D18 – (from 6 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	711599
		721176	-	Cable Entry Kit for D18 – (from 4 to 6 mm)			
		721163	-	Cable Entry Kit for D18 – (from 6 to 9 mm)			
		721164	-	Cable Entry Kit for D18 – (from 9 to 12 mm)			
		721165	-	Cable Entry Kit for D18 – (from 12 to 15 mm)			
		721166	-	Cable Entry Kit for D18 – (from 15 to 18 mm)			
530187	16	Single ECAM S7 – (from 3 to 7 mm)					
501747	BPEO S1,5 Evol FDP BRANCH 12 SLOTS	721162	1	Body Double ECAM D18 – (from 6 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	Support integrated in the closure body (Wall)
		721176	-	Cable Entry Kit for D18 – (from 4 to 6 mm)			
		721163	-	Cable Entry Kit for D18 – (from 6 to 9 mm)			
		721164	-	Cable Entry Kit for D18 – (from 9 to 12 mm)			
		721165	-	Cable Entry Kit for D18 – (from 12 to 15 mm)			
		721166	-	Cable Entry Kit for D18 – (from 15 to 18 mm)			
721144 530129	13 2	Single ECAM S9,5 – (from 3,5 to 9,5 mm) Single ECAM S18 – (from 5 to 18 mm)					
501751	BPEO S1,5 Evol FDP DROP 12 SLOTS	721162	1	Body Double ECAM D18 – (from 6 to 18 mm)	All cassette types	12 x cassettes 1 Slot 6 x cassettes 2 Slots	Support integrated in the closure body (Wall)
		721176	-	Cable Entry Kit for D18 – (from 4 to 6 mm)			
		721163	-	Cable Entry Kit for D18 – (from 6 to 9 mm)			
		721164	-	Cable Entry Kit for D18 – (from 9 to 12 mm)			
		721165	-	Cable Entry Kit for D18 – (from 12 to 15 mm)			
		721166	-	Cable Entry Kit for D18 – (from 15 to 18 mm)			
530187 530128	25 2	Single ECAM S7 – (from 3 to 7 mm) Single ECAM S12 – (from 4 to 12 mm)					
501491	BPEO S2 Evol CDP 28 SLOTS	721131 530129	1 6	Double ECAM D27 – (from 5 to 27 mm) Single ECAM S18 – (from 5 to 18 mm)	All cassette types	28 x cassettes 1 Slot 14 x cassettes 2 Slots	711600
501492	BPEO S2 Evol EDP 28 SLOTS	721131 530128 530129	1 10 2	Double ECAM D27 – (from 5 to 27 mm) Single ECAM S12 – (from 4 to 12 mm) Single ECAM S18 – (from 5 to 18 mm)	All cassette types	28 x cassettes 1 Slot 14 x cassettes 2 Slots	711600
501493	BPEO S2 Evol BDP 28 SLOTS	721130 530128	1 16	Double ECAM D20 – (from 5 to 20 mm) Single ECAM S12 – (from 4 to 12 mm)	All cassette types	28 x cassettes 1 Slot 14 x cassettes 2 Slots	711600
501494	BPEO S3 Evol CDP 48 SLOTS	721131 530129	1 6	Double ECAM D27 – (from 5 to 27 mm) Single ECAM S18 – (from 5 to 18 mm)	All cassette types	48 x cassettes 1 Slot 24 x cassettes 2 Slots	711600
501495	BPEO S3 Evol EDP 48 SLOTS	721131 530128 530129	1 10 2	Double ECAM D27 – (from 5 to 27 mm) Single ECAM S12 – (from 4 to 12 mm) Single ECAM S18 – (from 5 to 18 mm)	All cassette types	48 x cassettes 1 Slot 24 x cassettes 2 Slots	711600
501496	BPEO S3 Evol BDP 48 SLOTS	721130 530128	1 16	Double ECAM D20 – (from 5 to 20 mm) Single ECAM S12 – (from 4 to 12 mm)	All cassette types	48 x cassettes 1 Slot 24 x cassettes 2 Slots	711600
501675	BPEO S4 72 SLOTS	80 6113 2952 7	1	Double ECAM D27 – (from 5 to 27 mm)	All cassette types	72 x cassettes 1 Slot 36 x cassettes 2 Slots	711660
		530129	2	Single ECAM S18 – (from 5 to 18 mm)			
		80 6113 2949 3	5	Single ECAM S27 – (from 4 to 27 mm)			



Short ID of 5 mm (1 slot) cassettes	Cassettes for ITU G652.D / G657 fibre
541106	Cassette – 1 slot for 12 x HS Fusion Splice Protectors*
541182	Cassette – 1 slot 2 x 6 HS Fusion Splice Protectors*
541113	Cassette – 1 slot 9 x HS Fusion Splice Prot. and 1 x PLC Splitter**
541103	Cassette – 1 slot 6 x Fibrlok Mechanical Splices 2540-G
541155	Cassette – 1 slot 6x HS Fusion Splice Protectors* and 2 x PLC Splitters
541114	Cassette – 1 slot for 12 x ANT Crimp Splice Protectors

Short ID of 10 mm (2 slot) cassettes	Cassettes for ITU G652.D / G657 fibre
541121	Cassette – 2 slots 12 x HS Fusion Splice Protectors* or 12 Fibrlok Splice 2540-G
541104	Cassette – 2 slots 12 x HS Fusion Splice Protectors* and 1 x PLC Splitter**
541151	Cassette – 2 slots 24 x HS Fusion Splice Protectors* and 1 x PLC Splitter**
541108	Cassette – 2 slots 12 x Fibrlok Mechanical Splice 2540-G
541110	Cassette – 2 slots 10 x Fibrlok Mechanical Splice 2540-G and 1 x PLC Splitter**

*Dimensions of HS Fusion Splice Protectors (2,4 x 40 mm or 2,4 x 60 mm)

**Dimensions of PLC Splitter refer to Splice Cassette Product Bulletin

A double ECAM closure entry port can either host 1 Dual ECAM or 2 Single ECAM – Cross reference List –		
1 x Dual Closure Entry Port D27	1 x Double ECAM D27	2 x Single ECAM S18
1 x Dual Closure Entry Port D20	1 x Double ECAM D20	2 x Single ECAM S12
1 x Dual Closure Entry Port D18	1 x Double ECAM D18	2 x Single ECAM S12



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