3M Science.
Applied to Life.™

Communication Markets Division

3M™ Fiber Closures

Smart design makes your job easier.

Your connections deserve the best protection.

No matter the size and configuration of your network, protecting its connectivity is what counts. 3M™ Fiber Closures provide options for keeping your network technology safe and streaming.

3M is here to help you decide what's essential to your network setup. Knowing just a few basics about where you need fiber closures, what kind of connections you're making and your plans for expansion can help you make the right decision for your network today and as it grows.
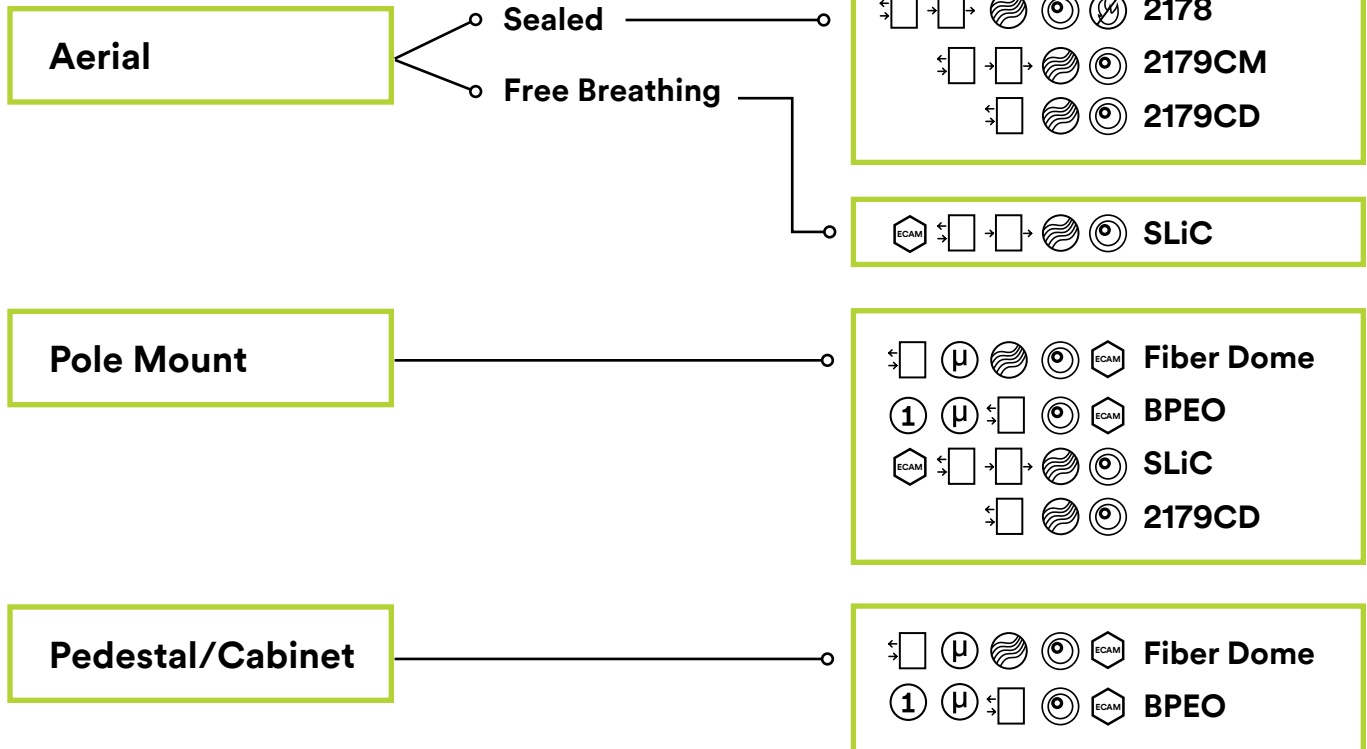
This guide showcases all of 3M's fiber closure product families, nearly all of which offer multiple models to protect fiber at various inside and outside plant locations. With one of the most extensive fiber closure portfolios, 3M fiber closures are used in networks all over the world.

The tools provided here in this brochure will help you take the first steps in protecting your fiber optics. Our dedicated technical service and sales team is on-hand to answer additional questions and help you make the best investment for your network.
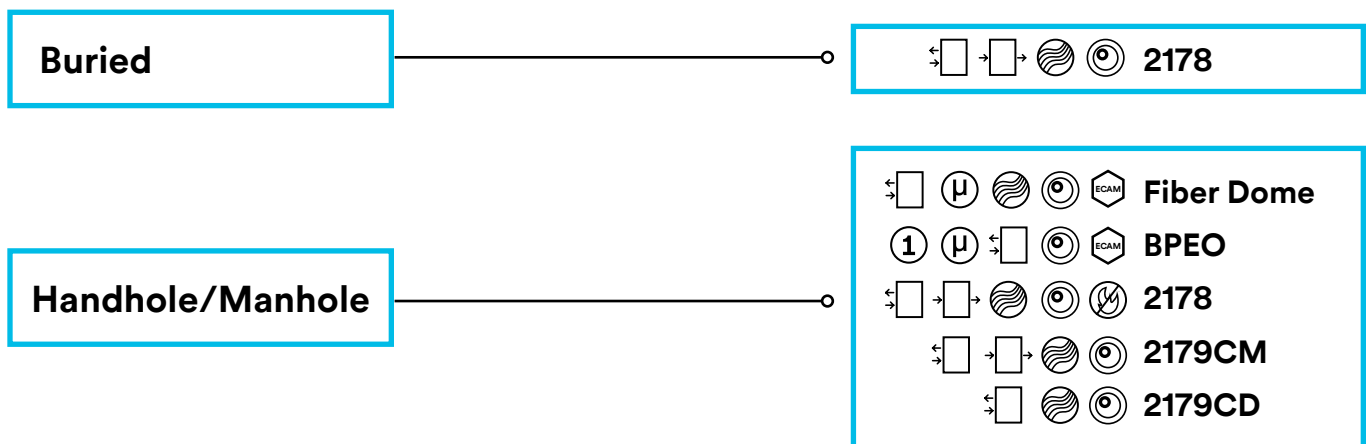
How to choose the right 3M™ Fiber Closure

There are several things to consider when choosing the right fiber closure for your network. Use the chart at right to narrow down your options and explore advanced features on the product pages.
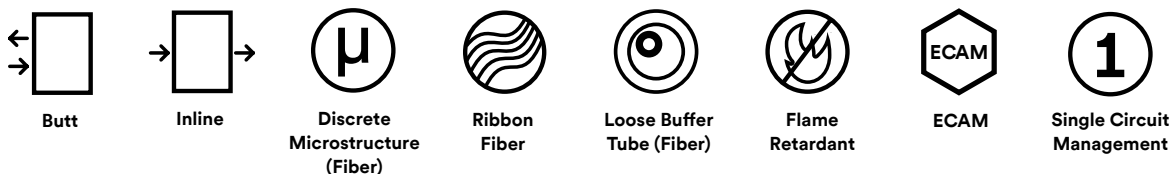
Above Grade

Aerial
- Sealed
  - ⬜ μ 〰 ◎ ⬡ECAM **Fiber Dome**
  - ① μ ⬜ ◎ ⬡ECAM **BPEO**
  - ⬜ ⬜ 〰 ◎ 🚫 **2178**
  - ⬜ ⬜ 〰 ◎ **2179CM**
  - ⬜ 〰 ◎ **2179CD**
- Free Breathing
  - ECAM ⬜ ⬜ 〰 ◎ **SLiC**

Pole Mount
- ⬜ μ 〰 ◎ ⬡ECAM **Fiber Dome**
- ① μ ⬜ ◎ ⬡ECAM **BPEO**
- ECAM ⬜ ⬜ 〰 ◎ **SLiC**
- ⬜ 〰 ◎ **2179CD**

Pedestal/Cabinet
- ⬜ μ 〰 ◎ ⬡ECAM **Fiber Dome**
- ① μ ⬜ ◎ ⬡ECAM **BPEO**

Below Grade

Buried
- ⬜ ⬜ 〰 ◎ **2178**

Handhole/Manhole
- ⬜ μ 〰 ◎ ⬡ECAM **Fiber Dome**
- ① μ ⬜ ◎ ⬡ECAM **BPEO**
- ⬜ ⬜ 〰 ◎ 🚫 **2178**
- ⬜ ⬜ 〰 ◎ **2179CM**
- ⬜ 〰 ◎ **2179CD**

Icon key

Icon	Label
⬜	Butt
⬜	Inline
μ	Discrete Microstructure (Fiber)
〰	Ribbon Fiber
◎	Loose Buffer Tube (Fiber)
🚫	Flame Retardant
ECAM	ECAM
①	Single Circuit Management

3M™ Fiber Optic Splice Closures 2178

The 3M™ Fiber Optic Splice Closure 2178 family provides many models and configurations, so you can expand and future-proof your network with compatible, durable technology. Re-enterable designs bring additional ease of ongoing configuration in outside and inside plant environments.

- Full range of sizes to fit your specific application

- No special tools required, only a standard torque wrench

- Easily expandable when additional splicing capacity is needed

- Can be deployed in most applications: buried, below grade, aerial and pole mount; inline or butt

- Gasket sealing system makes it reusable and easy to re-enter

- Separate area for routing, protecting and expressing buffer tubes and ribbon fibers

- Multiport grommets provide entry for drops or cables

- Flame retardant versions available

Expand as your network grows

3M™ Fiber Optic Splice Closure 2178-LL pictured above. 3M™ Cable Addition Kits can be added to expand your splice capacity or cable entry ports as network needs arise.

3M™ Fiber Optic Splice Closure 2178 Dimensions

Product Name	Size (mm) in. (L x W x H)
2178-XSB	(369.8 × 256.5 × 117.3) 14.6 × 10.1 × 4.6
2178-XLB	(369.8 × 256.5 × 147) 14.6 × 10.1 × 5.8
2178-S	(556.3 × 215.9 × 119.4) 21.9 × 8.5 × 4.7
2178-SL	(556.3 × 215.9 × 203.2) 21.9 × 8.5 × 8.0
2178-LS	(556.3 × 215.9 × 203.2) 21.9 × 8.5 × 8.0
2178-LL	(556.3 × 215.9 × 287.0) 21.9 × 8.5 × 11.3
2178-XL	(660.4 × 337.8 × 279.4) 27.0 × 13.3 × 11.0

3M™ 4- and 6-Port Grommets for 3M™ Fiber Optic Splice Closure 2178 Series

A variety of stackable splice trays are available for use with the 3M™ Fiber Optic Splice Closures 2178.

3M™ Fiber Dome Closures

The 3M™ Fiber Dome Closure Family offers extensive installation versatility – below grade and aerial – along with multiple sizes that fit most butt/branch splicing configurations. Designed for easy installation and multiple re-entries in hot, dry, humid and cold climates.

- Features a fixed O-ring sealing system along with an innovative latching mechanism

- No special tools required, reducing tooling costs and enabling easy installation and entry

- Convenient 3M™ External Cable Assembly Module (ECAM)

- Stacked or hinged tray options with modular splice holders

- Variety of sizes for virtually any application

3M™ Fiber Dome Closures Dimensions

Product Name	Size (mm) in. (L x W x H)
Fiber Dome, FDC 08M-A	(385 × 152 × 182) 15.2 × 6.0 × 7.2
Fiber Dome, FDC 08S-A	(541 × 152 × 182) 21.3 × 6.0 × 7.2
Fiber Dome, FDC 08S-B	(541 × 152 × 182) 21.3 × 6.0 × 7.2
Fiber Dome, FDC 08S-C	(541 × 152 × 182) 21.3 × 6.0 × 7.2
Fiber Dome, FDC 10S-D	(548 × 255) 21.6 × 10.1
Fiber Dome, FDC 10S-E	(548 × 255) 21.6 × 10.1
Fiber Dome, FDC 12S-F	(658 × 335) 25.9 × 13.2

3M™ External Cable Assembly Module (ECAM) port design
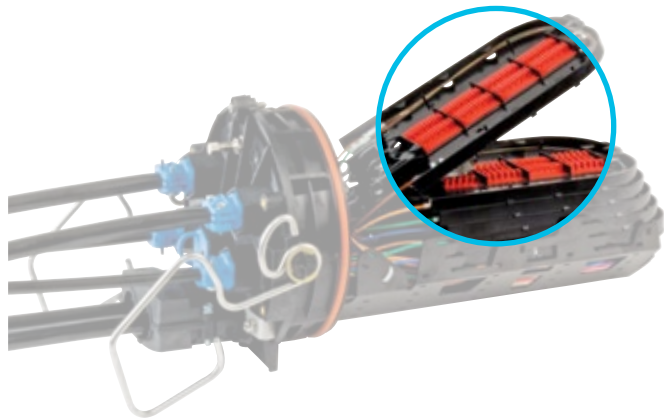
Built-in integral multipurpose fiber storage system and hinged tray with modular splice holders
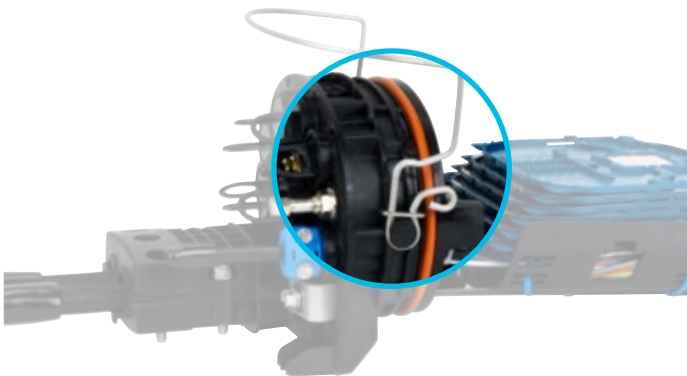
Simple, error-free closure sealing and re-entry system

3M™ External Cable Assembly Module (ECAM) System

Plug-and-play
Helps reduce installation time & labor costs because the cable preparation and installation are completed outside the of the closure body.

Simple field installation
Easy to add or remove cables without breaking previously installed cable seals.

Drop on demand
No need to carry inventory of different lengths of drops. Make your own drop when you need it.

3M™ Fiber Optic Closure BPEO

3M™ Fiber Optic Closures BPEO support evolving fiber optic networks with modular solutions. Tool-less and fully mechanical, BPEO closures are compatible with the 3M™ External Cable Assembly Module (ECAM) system and can be used with micro-cable. Compatible with multiple drop environments and an excellent choice for manholes and handholes.

- Single circuit and single element fiber organizer with a wide range of splicing trays. 3M BPEO range accommodates from 4 trays (BPEO Size 0) up to 48 trays (BPEO size 3)

- Fiber organizer included with capacities of 4, 12, 28, 48 or 72 splice tray slots depending on the size you require

- Variety of splice trays available so you can mix and match your splicing to suit your application

- Mechanical latch closing system is quick and easy to open without special tools

- Each size of 3M BPEO comes with different port configurations for all kinds of applications (branch, cable distribution, drop cable distribution)

latching system

variety of splice trays to stay organized

entry ports for different sizes of cable
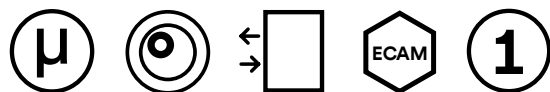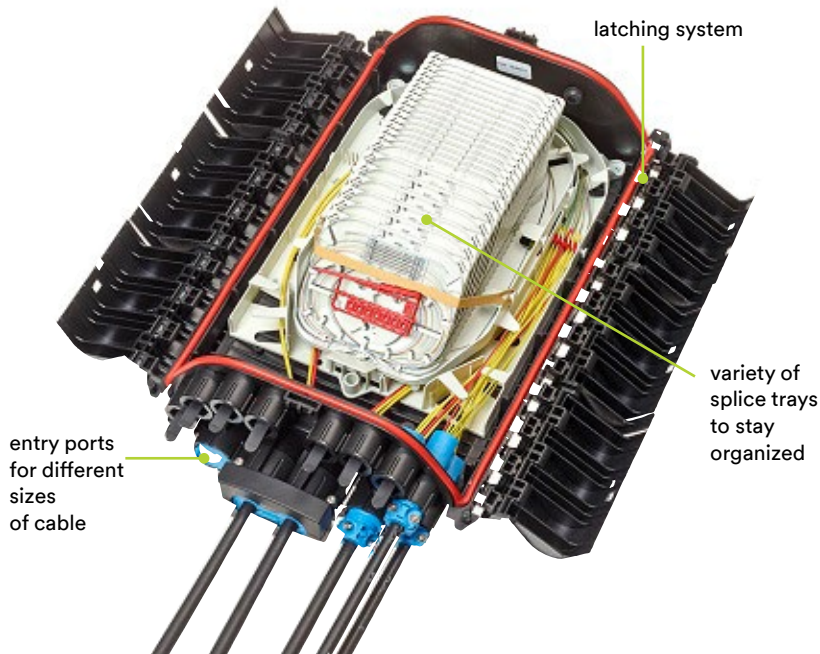
3M™ Fiber Optic Closure BPEO Size 2

The 3M™ Fiber Optic Closure BPEO Size 0 offers a compact splicing solution.

The 3M™ Fiber Optic Closure BPEO 1.5 has many ports, offering flexibility in installation depending on the size of cables needed.

3M™ External Cable Assembly Module (ECAM) System

Plug-and-play
Helps reduce installation time & labor costs because the cable preparation and installation are completed outside the of the closure body.

Simple field installation
Easy to add or remove cables without breaking previously installed cable seals.

Drop on demand
No need to carry inventory of different lengths of drops. Make your own drop when you need it.

3M™ Fiber Optic Closure BPEO Dimensions

Product Name	Size (mm) in. (L x W x H)
BPEO S0	(240 × 230 × 90) 9.5 × 9.1 × 3.5
BPEO S1	(382 × 204 × 92) 15 × 8.1 × 3.6
BPEO S1.5	(382 × 204 × 120) 15 × 8.1 × 4.7
BPEO S2	(520 × 341 × 149) 20.5 × 13.4 × 5.9
BPEO S3	(661 × 341 × 149) 26 × 13.4 × 5.9
BPEO S4	(335 × 310 × 658) 13.2 × 12.2 × 25.9

3M™ SLiC™ Aerial Closures

3M™ SLiC™ Fiber Aerial Closures protect fiber optics installed in aboveground areas. SLiC closures allow outdoor ambient air circulation, draining away condensation from the splice. Plus, the closures protect fiber connections from direct sunlight and weather.

- Free-breathing, weather resistant single-piece closure for aerial applications

- Single-piece construction permits complete splice access after placement without the removal of the closure and cable.

- Rubber end seals help ensure a snug fit on cables

- Can be used for inline or butt applications

3M™ SLiC™ Fiber Aerial Closures 733 and 533
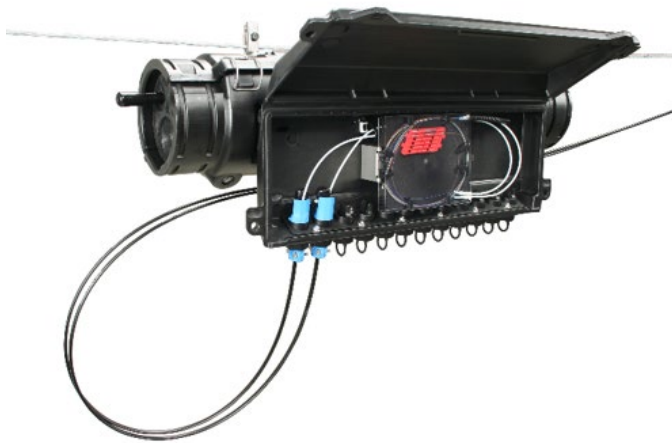
3M™ SLiC™ Fiber Aerial Terminal Closure 530 enables craft separation

3M™ SLiC™ Fiber Aerial Closure 533
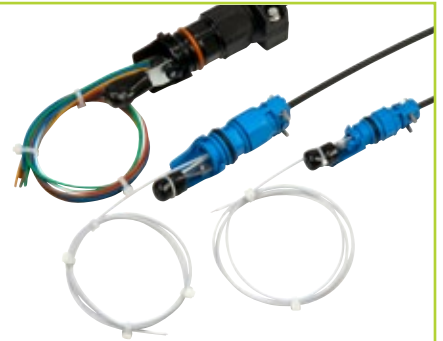
3M™ External Cable Assembly Module (ECAM) System

Plug-and-play
Helps reduce installation time & labor costs because the cable preparation and installation are completed outside the of the closure body.

Simple field installation
Easy to add or remove cables without breaking previously installed cable seals.

Drop on demand
No need to carry inventory of different lengths of drops. Make your own drop when you need it.

3M™ SLiC™ Aerial Closures Dimensions

Product Name	Size (mm) in. (D x L)
SLiC 533	(127 × 838) 5 × 33
SLiC 733	(178 × 838) 7 × 33

3M™ Fiber Optic Closure 2179 CD

3M™ Fiber Optic Splice Closure 2179 CD accommodates various splice applications such as express, branch or drop. Using mechanical sealing technology, the dome seals from base-to-dome preventing ingress and enabling easy re-entry. Plus, the cable ports are designed for use with heat shrink sealing technology for robust protection from the elements.

- Designed to be used in virtually any application (aerial, pedestal, buried, handhole, manhole)

- Can accommodate a maximum of 96 single fusion splices

- Mechanical sealing technology for the base-to-dome sealing provides for easy installation & re-entry

- Cable ports are sealed using 3M™ Heat Shrink technology

3M™ Fiber Optic Closure 2179 CD Dimensions

Product Name	Size (mm) in. (D x L)
2179CD HS-S4	(160 × 540) 6.30 × 21.25

3M™ Fiber Optic Closure 2179 CM

The 3M™ Fiber Optic Closure 2179 CM is a versatile asset for FTTH applications, including express, branch or drop in the outside plant. With 12 distribution ports, it's possible to protect a large network with fewer closures – offering attractive cost savings and convenience.

- Designed to be used in virtually any application (aerial, pedestal, buried, handhole, manhole)
- Compact in size with multi-port design
- Mechanical latch design with gasket sealing for easy re-entry
- Supports both midspan or express applications

Top cable entry ports

3M™ Fiber Optic Closure 2179 CM Dimensions

Product Name	Size (mm) in. (L x W x D)
2179CM	(430 × 200 × 120) 16.9 × 7.9 × 4.7
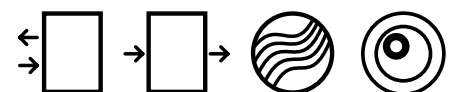
3M™ Fiber Optic Splice Closure Port Sizes & Configurations

Number of Ports	1	2	3	4	5	6	7	8	9	10	11	12	13
3M™ Fiber Optic Splice Closure 2178 Family (use of 3M™ Cable Addition Kit 2181 where indicated)													
2178-S/SL	1.0	1.0	1.0	1.0									
2178-S/SL + 2181-LS (x1)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0					
2178-S/SL + 2181-LS (x2)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
2178-S/SL + 2181-LS (x3)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2178-LS	1.0	1.0	1.0	1.0									
2178-LS + 2181-LS (x1)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0					
2178-LS+ 2181-LS (x2)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
2178-LS+ 2181-LS (x3)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2178-LL	1.0	1.0	1.0	1.0									
2178-LL + 2181-LS (x1)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0					
2178-LL+ 2181-LS (x2)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
2178-LL+ 2181-LS (x3)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2178-XSB	1.4	1.0	1.0										
2178-XSB + 2181-XB (x1)	1.4	1.4	1.0	1.0	1.0	1.0							
2178-XLB	1.4	1.0	1.0										
2178-XLB + 2181-XB (x1)	1.4	1.4	1.0	1.0	1.0	1.0							
2178-XL	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0					
2178-XL + 2181-XL (x1)	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0	1.0
3M™ SLiC™ Fiber Aerial Closures													
SLiC 533	1.4	1.4	1.4	1.4									
SLiC 547	1.4	1.4	1.4	1.4									
SLiC 733	1.8	1.8	1.8	1.8									
SLiC 530	1.4	1.4	1.4	1.4									

14	15	16

1.0	1.0	1.0
1.0	1.0	1.0
1.0	1.0	1.0
1.0	1.0	1.0

Legend

7	**ECAM Single D 3-7 mm / 0.12" - 0.27"**
9.5	**ECAM Single D 3.5-9.5 mm / 0.14" - 0.37"**
12	**ECAM Single D 4-12 mm / 0.15" - 0.47"**
18	**ECAM Single D 5-18 mm / 0.20" - 0.71"**
27	**ECAM Single D 5-27 mm / 0.20" - 1.06"**

1.0	**Round Single D 1.0" / 25.4 mm**
1.4	**Round Single D 1.4" / 35.5 mm**
1.8	**Round Single D 1.8" / 45.7 mm**

12 12	**One ECAM Double D 5-18 mm / 0.20" - 0.71"** **or two ECAM Single D 4-12 mm/0.15" - 0.47"**
12 12	**One ECAM Double D 5-27 mm / 0.20" - 0.78"** **or two ECAM Single D 4-12 mm / 0.15" - 0.67"**
18 18	**One ECAM Double D 5-27 mm / 0.20" - 1.06"** **or two ECAM Single D 5-18 mm / 0.20" - 0.71"**

3M™ Fiber Optic Splice Closure Port Sizes & Configurations

Number of Ports	1	2	3	4	5	6	7	8	9	10	11	12	13	14

3M™ Fiber Optic Closures BPEO Family

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
BPEO S0 FDP BRANCH	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	7					
BPEO S0 FDP DROP	7	7	7	7	7	7	7	7	7	7	7	7	9.5	9.5
BPEO S1 EOC	18	18	18	18	18									
BPEO S1 CDP	18	18												
BPEO S1 EDP	12	12	12	12										
BPEO S1 FDP BRANCH	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5						
BPEO S1 FDP DROP	7	7	7	7	7	7	7	7	7	7	7	7	7	7
BPEO S1.5 FDP BRANCH	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	18
BPEO S1.5 FDP DROP	7	7	7	7	7	7	7	7	7	7	7	7	7	7
BPEO S2 CDP	18	18	18	18	18	18								
BPEO S2 EDP	12	12	12	12	12	12	12	12	12	12	18	18		
BPEO S2 BDP	12	12	12	12	12	12	12	12	12	12	12	12	12	12
BPEO S3 BDP	18	18	18	18	18	18	18	18						
BPEO S3 CDP	12	12	12	12	12	12	12	12	12	12	18	18		
BPEO S3 EDP	12	12	12	12	12	12	12	12	12	12	12	12	12	12

3M™ Fiber Dome Closures Family

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FDC 08M-A	12	12	12	12	12	12	12	12						
FDC 08M-B	18	18	12											
FDC 08S-A	12	12	12	12	12	12	12	12						
FDC 08S-B	18	18	12											
FDC 08S-C	18	18	18	18	12									
FDC 10S-D	18	18	18	18	18									
FDC 10S-E	18	18	18	18	18	18	18							
FDC 12S	27	27	27	27	27									

15	16	17	18	19	20	21	22	23	24	25	26	27			1
															12 12
															12 12
															12 12
															12 12
															12 12
7	7														12 12
18															12 12
7	7	7	7	7	7	7	7	7	7	7	12	12			12 12
															18 18
															18 18
12	12														12 12
															18 18
															18 18
12	12														12 12

15	16	17	18	19	20	21	22	23	24	25	26	27			1
															20 20
															27 27
															20 20
															27 27
															27 27
															27 27

3M™ Fiber Optic Splice Closure 2178 Splice Capacity

Product Configuration	Splice Capacity per Splice Tray																				
	2527				2522			2523			2524		2532			2543		
	Trays	Sf 24	Sf 48	Mf 144	Trays	Sf 24	Mf 144	Trays	Sf 48	Mf 144	Trays	Sf 24	Trays	Sf 24	Mf 144	Trays	Sf 24	Mf 144
2178-S or SL	2	48	96	288	2	48	288	2	96	288	2	48	-	-	-	2	48	288
2178-S or SL w/ one 2181-LS	5	120	240	720	5	120	720	4	192	576	4	96	-	-	-	5	120	720
2178-S or SL w/ one 2181-LS	2	48	96	288	2	48	288	2	96	288	2	48	-	-	-	2	48	288
2178-S or SL w/ two 2181-LS	8	192	384	864	8	192	864	6	288	864	6	144	-	-	-	8	192	864
2178-S or SL w/ two 2181-LS	5	120	240	720	5	120	720	4	192	576	4	96	-	-	-	5	120	720
2178-S or SL w/ two 2181-LS	2	48	96	288	2	48	288	2	96	288	2	48	-	-	-	2	48	288
2178-S or SL w/ three 2181-LS	8	120	384	864	8	192	864	6	288	864	6	144	-	-	-	8	192	864
2178-S or SL w/ three 2181-LS	5	120	240	720	5	120	720	5	240	720	5	120	-	-	-	5	120	720
2178-S or SL w/ three 2181-LS	2	48	96	288	2	48	288	2	96	288	2	48	-	-	-	2	48	288
2178-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LS w/ one 2181-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LS w/ two 2181-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LS w/ two 2181-LS	10	240	480	864	9	216	864	9	432	864	9	216	-	-	-	10	240	864
2178-LS w/ three 2181-LS	10	240	480	864	9	216	864	9	432	864	9	216	-	-	-	10	240	864
2178-LS w/ three 2181-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LL	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LL w/ one 2181-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-LL w/ two 2181-LS	7	168	336	864	6	144	864	6	288	720	6	144	-	-	-	7	168	864
2178-LL w/ two 2181-LS	10	240	480	864	9	216	864	9	432	864	9	216	-	-	-	10	240	864
2178-LL w/ three 2181-LS	10	240	480	864	9	216	864	9	432	864	9	216	-	-	-	10	240	864
2178-LL w/ three 2181-LS	7	168	336	864	6	144	864	6	288	864	6	144	-	-	-	7	168	864
2178-XSB	-	-	-	-	-	-	-	-	-	-	-	-	2	48	288	-	-	-
2178 XSB w/ one 2181 XB	-	-	-	-	-	-	-	-	-	-	-	-	2	48	288	-	-	-
2178 XLB	-	-	-	-	-	-	-	-	-	-	-	-	4	96	432	-	-	-
2178 XLB w/one 2181	-	-	-	-	-	-	-	-	-	-	-	-	4	96	432	-	-	-
2178-XL	12	288	576	1728	12	288	1728	12	576	1728	12	288	-	-	-	12	288	1728
2178-XL w/ one 2181-XL	12	288	576	1728	12	288	1728	12	576	1728	12	288	-	-	-	12	288	1728

3M™ Fiber Optic Closures BPEO Family Splice Capacity

Single Fiber Splicing Capacity Max	Number of trays Max	Splice capacity Max (G652 D) fiber	Splice capacity Max (G657 fiber)	Splice capacity Max
		Single Fiber		Ribbon Fiber
BPEO S0	4	48	96	NA
BPEO S1	12	144	288	NA
BPEO S1.5	12	144	288	NA
BPEO S2	28	336	672	NA
BPEO S3	48	576	1152	NA
BPEO S4	72	864	1728	NA

3M™ Fiber Dome Closures Family Splice Capacity

	Number of trays Max	Splice Capacity Single Fiber	Splice Capacity Ribbon Fiber	Splice Trays
FDC 08M-A	6	72	144	2539 2540
FDC 08S-A	6	96	288	2538 2539 2540
FDC 08S-B	6	96	288	2538 2539 2540
FDC 08S-C	6	96	288	2538 2539 2540
FDC 10S-D	6	288	432	2541
FDC 10S-E	6	288	432	2541
FDC 12S-F	8	576	864	2542

3M™ SLiC Closures Family Splice Capacity

	Number of trays Max	Splice Capacity Single Fiber	Splice Capacity Ribbon Fiber	Splice Tray
SLiC 533	3	144	432	2527
SLiC 733	6	288	864	2527

3M and SLiC are trademarks of 3M Company.

3M

Communication Markets Division
6801 River Place Blvd.
Austin, TX 78726-9000 USA

Phone 1-800-426-8688
Fax   1-800-626-0329
Web   3M.com/Telecom