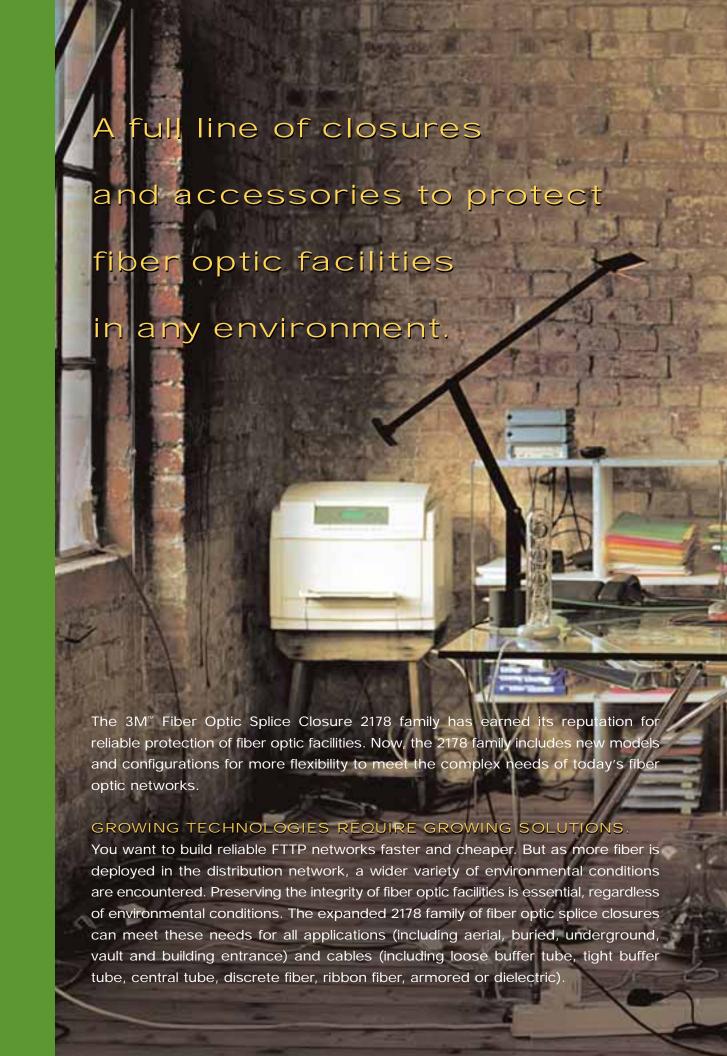


Flexible Fiber Management Solutions







3M™ Fiber Optic Splice Closure 2178 Family

MULTIPLE SOLUTIONS FOR EVOLVING NETWORKS.

The 3M Fiber Optic Splice Closure 2178 family provides multiple real-world solutions with five key aspects:

1 A Complete Product Family

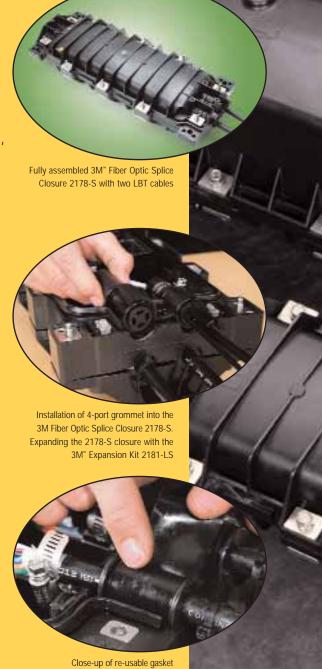
The 3M Fiber Optic Splice Closure 2178 family now includes five distinct models (XSB, S, LS, LL and XL) in both flame retardant and non flame retardant versions, each with flexibility built in for growing networks.

2 Future-Proof Solutions

The 2178 family has scalability and flexibility, allowing you to expand the system based on splicing capacity and the number of cable entry ports. It also allows you to defer your investment until it is required.

3 Easily Re-Enterable Designs

A re-usable gasket makes tool-less re-entry easy, while bolted halves provide greater security than that of dome closures. With the 2178 family, you can re-enter, re-configure and add or remove cables in all outside plant and inside plant environments.





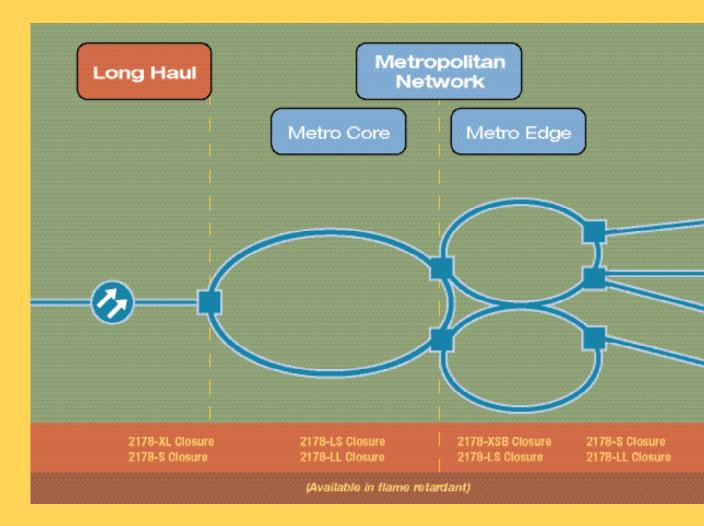
MULTIPLE SOLUTIONS (CONTINUED)

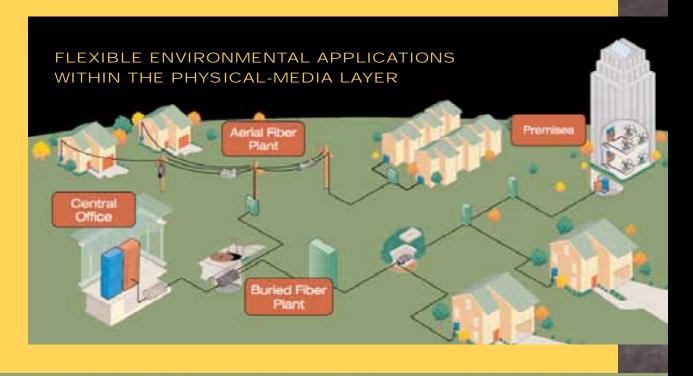
4 Flexible Environmental Applications

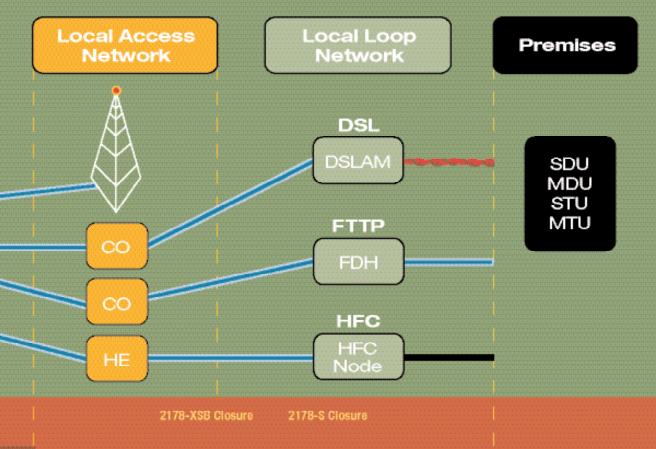
The 3M[™] Fiber Optic Spice Closure 2178 family can be effectively used in nearly any environment including aerial (pole and strand) mount, central office vault, manhole, pedestal and handhole. It can also accommodate all splicing methods (mechanical and fusion) as well as inline and butt splicing configurations.

5 Network Flexibility

3M designs a variety of sizes, materials (flame retardant vs. non flame retardant) and configuration options so that our fiber optic splice closures can be used in every segment of the network. A single product family meets a range of needs.







FLEXIBILITY THAT CAN SAVE YOU TIME AND MONEY.

The 3M™ Fiber Optic Splice
Closure 2178 family provides
excellent system flexibility
for both existing and new
fiber deployments. Products
in the 2178 family are
industry-proven and comply
with appropriate UL and
Telcordia standards. The
flexible design and common
accessories allow you to
maintain a reduced inventory,
saving time and money.

SMART DESIGN MAKES YOUR JOB EASIER.

All 2178 closures are designed to be easy to install, easy to use and easy to re-enter. The re-usable gasket makes tool-less re-entry as easy as any other system with almost no training necessary.

The 2178 family accommodates all splicing configurations (inline or butt). All of the closures in the 2178 family feature tough, rigid non-filled closures tested under harsh, real-world situations to stand up to severe conditions of moisture, vibration and temperature extremes.





system (the cable addition kit and grommets) make system expansion even easier than before. A flexible tray system allows positionable or fixed splice inserts. Technicians can re-enter and swap out splice holders, and mix and match splice types (fusion and mechanical). The same tray can be used for discrete or mass splicing.

addition kit. Two additions to the

All of these features combine to give you an enhanced ability to offer optimum bandwidth for triple play services of voice, data and video.

3M™ Fiber Optic Splice

Closure 2178

4- and 6-Port Grommets

8	Product Number	Size in. (mm)	Splice Configuration	Cable Entry Ports	Maximum Splice Capacity
	2178-XSB	14.6 x 10.1 x 4.6 (369.8 x 256.5 x 117.3)	Butt	3 Butt	48 Single Fusion 144 Mass Fusion
1	2178-S	21.9 x 8.5 x 4.7 (556.3 x 215.9 x 119.4)	Inline Butt	4 Inline 2 Butt	96 Single Fusion 288 Mass Fusion
50,00	2178-LS	21.9 x 8.5 x 8.0 (556.3 x 215.9 x 203.2)	Inline Butt	4 Inline 2 Butt	288 Single Fusion 864 Mass Fusion
	2178-LL	21.9 x 8.5 x 11.3 (556.3 x 215.9 x 287.0)	Inline Butt	4 Inline 2 Butt	288 Single Fusion 864 Mass Fusion
melional con-	2178-XL	27.0 x 13.3 x 11.0 (660.4 x 336.6 x 279.4)	Inline Butt	8 Inline 4 Butt	576 Single Fusion 1728 Mass Fusion

3M[™] Fiber Optic Splice Closure 2178-XSB

Available in flame retardant



3M™ Fiber Optic Splice Closure 2178-S

Available in flame retardant



3M" Fiber Optic Splice Closure 2178-LS Available in flame retardant



3M[™] Fiber Optic Splice Closure 2178-LL



3M[™] Fiber Optic Splice Closure 2178-XL

Available in flame retardant

Reliable Protection for your Application.

The 3M™ Fiber Optic Splice Closure 2178 Family provides secure protection for a broad range of fiber cables. The 2178 family is engineered to meet specific needs and field conditions, with different sizes to accommodate varying splice counts.

All 2178 closures are made of a tough chemical-resistant material and have a new gasket seal making them ideal for a wide variety of applications. They feature tough, rigid non-filled closures, tested under real-world conditions, that stand up to moisture, vibration and extreme temperatures.



Grow as you Go with Multiple Entry Port Configurations.

3M™ FIBER OPTIC SPLICE CLOSURE 2178

2178-XSB

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(14.6" x 10.1" x 4.6")	Butt	2 Butt	1 Butt



2178-S

Size	Splice	Max Cable Entry Ports	
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 4.7")	Butt or Inline	2 Butt, 2 Inline	0 Butt, 2 Inline



2178-S with one 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 6.2")	Butt or Inline	2 Butt, 2 Inline	2 Butt, 6 Inline



2178-S with two 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 7.7")	Butt or Inline	2 Butt, 2 Inline	4 Butt, 10 Inline



2178-S with three 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 9.2")	Butt or Inline	2 Butt, 2 Inline	6 Butt, 14 Inline



2178-LS

Size	Splice		Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 8.0")	Butt or Inline	2 Butt, 2 Inline	0 Butt, 2 Inline



2178-LS with one 2181-LS

Size	Splice	Max Cable Entry Ports	
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 9.5")	Butt or Inline	2 Butt, 2 Inline	2 Butt, 6 Inline

3M[™] FIBER OPTIC SPLICE CLOSURE 2178

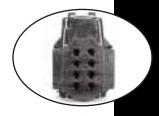
2178-LS with two 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 11.0")	Butt or Inline	2 Butt, 2 Inline	4 Butt, 10 Inline



2178-LS with three 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 12.5")	Butt or Inline	2 Butt, 4 Inline	6 Butt, 14 Inline



2178-LL

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 11.3")	Butt	2 Butt, 2 Inline	0 Butt, 2 Inline



2178-LL with one 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 12.8")	Butt	2 Butt, 2 Inline	2 Butt, 6 Inline



2178-LL with two 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 14.3")	Butt	2 Butt, 2 Inline	4 Butt, 10 Inline



2178-LL with three 2181-LS

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(21.9" x 8.5" x 15.8")	Butt	2 Butt, 4 Inline	6 Butt, 14 Inline



2178-XL

Size	Splice	Max Cable	Entry Ports
(L x W x H)	Application	Main	Branch
(27.0" x 13.3" x 11.0")	Butt or Inline	2 Butt, 2 Inline	2 Butt, 6 Inline



Flexible Fiber Management.

One of the greatest advantages of the 3M[™] Fiber Optic Splice Closure 2178 Family is flexibility. With five different closures, seven tray choices and several expansion kits, there are more configuration choices than ever.

3M™ FIBER OPTIC SPLICE TRAYS

Model Number	Description	Splices Accommodated	Splice Capacity per Tray
2532	Stackable, fiber entry/exit both ends of tray, positionable splice holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok [®]) Mass Fusion	24 12 72
2540-12-DF/36-MF	Hinged, fixed spliced holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok™) Mass Fusion	12 12 36
2539-12-DF	Hinged, fixed spliced holders	Single Fusion (45 or 60mm)	12
2522	Stackable hinged tray, fiber entry/exit at any corner of the tray, fixed splice holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok™) Mass Fusion	24 12 120
2523	Stackable hinged tray, fiber entry/exit at any corner of the tray, fixed splice holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok™) Mass Fusion	48 24 144
2527	Stackable, fiber entry/exit both ends of tray, positionable splice holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok™) Mass Fusion	24 12 144
2524	Stackable, hinged tray lid, side entry, fixed splice holders	Single Fusion (45 or 60mm) Single Mechanical (Fibrlok [™])	24 24

Select the Right Combination For Your Specific Application.

As the chart below demonstrates, 3M provides several options for configuring the products you need today, with room to grow tomorrow. Follow the example to the right to find the components for your particular application.

SPECIFICATIONS

PRODUCT CONFIGURATION		CABLE ENTRY PORTS PER SPLICING CONFIGURATION								
	1 [BUTT	II	ILINE						
	MAIN	BRANCH	MAIN	BRANCH	SIZE					
2178-S	2	0	2	2	1.0"					
2178-S w/ one 2181-LS	2	0	2	2	1.0"					
2178-S w/ one 2181-LS	2	2 2	2	6	1.0"					
2178-S w/ two 2181-LS	2	0	2	2	1.0"					
2178-S w/ two 2181-LS	2	2	2	6	1.0"					
2178-S w/ two 2181-LS	2	4	2	10	1.0"					
2178-S w/ three 2181-LS	2	2	2	6	1.0"					
2178-S w/ three 2181-LS	2	4	2	10	1.0"					
2178-S w/ three 2181-LS	2	6	2	14	1.0"					
2178-LS	2	0	2	2	1.0"					
2178-LS w/ one 2181-LS	2	2	2	6	1.0"					
2178-LS w/ two 2181-LS	2	4	2	10	1.0"					
2178-LS w/ two 2181-LS	2	2	2	6	1.0"					
2178-LS w/ three 2181-LS	2	4	2	10	1.0"					
2178-LS w/ three 2181-LS	2	6	2	14	1.0"					
2178-LL	2	0	2	2	1.0"					
2178-LL w/ one 2181-LS	2	2	2	6	1.0"					
2178-LL w/ two 2181-LS	2	4	2	10	1.0"					
2178-LL w/ two 2181-LS	2	2	2	6	1.0"					
2178-LL w/ three 2181-LS	2	4	2	10	1.0"					
2178-LL w/ three 2181-LS	2	6	2	14	1.0"					
2178-XSB	2	1	-	-	2 - 1.0" 1 - 1.4"					
2178-XL	2	2	2	6	2 - 1.0" 2 - 1.4"					

How to use chart:

- 1 Select your splice configuration 3 Choose type of tray (p.14)
- 2 Determine # of branch ports
- 4 Select appropriate splice capacity

Configuration Example — If your application requires:

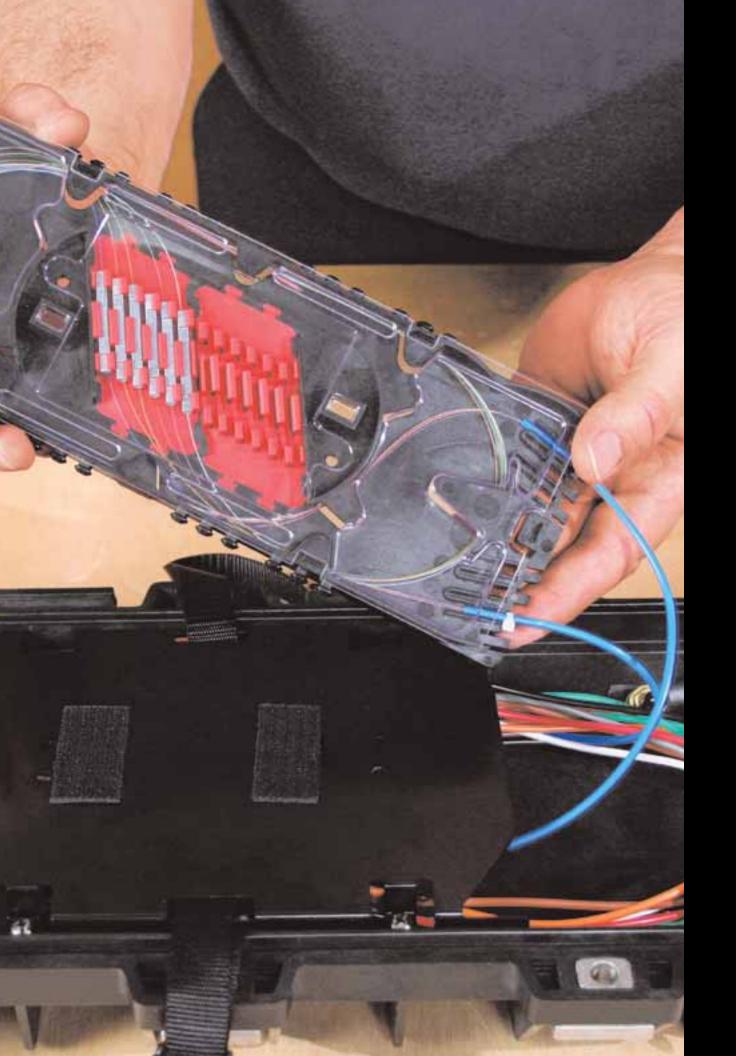
- 1 Butt splice configuration
- 3 Fixed-position splice holder

2 2 branch ports

4 96 single fusion splices

Then you would need the 3M™ Fiber Optic Splice Closure 2178-S with one 3M™ Cable Addition Kit 2181 and 3M™ Splice Tray 2523.

	2527			2522		3 2	523		2	524		2	2532		2539	-12-[)F	2540-12-DF/36-MF		
TRAYS	SF 24	MF 144	TRAYS	SF 24	MF 144	TRAYS	SF 48	MF 144	TRAYS	SF 24	MF NA	TRAYS	SF 24	MF 72	TRAYS	SF 12	MF NA	TRAYS	SF 12	MF 36
2	48	288	2	48	288	2	96	288	2	48	-	-	-	-	-	-	-	-	-	-
5	120	720	5	120	720	4	192	576	4	96	-	-	-	-	-	-	-	-	-	-
2	48	288	2	48	288	2 4	96	288	2	48	-	-	-	-	-	-	-	-	-	-
8	192	864	8	192	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
5	120	720	5	120	720	4	192	576	4	96	-	-	-	-	-	-	-	-	-	-
2	48	288	2	48	288	2	96	288	2	48	-	-	-	-	-	-	-	-	-	-
8	120	864	8	192	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
5	120	720	5	120	720	5	240	720	5	120	-	-	-	-	-	-	-	-	-	-
2	48	288	2	48	288	2	96	288	2	48	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
10	240	864	9	216	864	9	432	864	9	216	-	-	-	-	-	-	-	-	-	-
10	240	864	9	216	864	9	432	864	9	216	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	720	6	144	-	-	-	-	-	-	-	-	-	-
10	240	864	9	216	864	9	432	864	9	216	-	-	-	-	-	-	-	-	-	-
10	240	864	9	216	864	9	432	864	9	216	-	-	-	-	-	-	-	-	-	-
7	168	864	6	144	864	6	288	864	6	144	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	2	48	144	6	72	-	4	48	144
12	288	1728	12	288	1728	12	576	1728	-	-	-	-	-	-	-	-	-	-	-	-



3M™ Fiber Optic Closure 2178 Family

ORDERING INFORMATION

3M [™] FIBER OPTIC SPLICE CLOSURE 2178 FAMILY CONFIGURATIONS									
PRODUCT NUMBER	DESCRIPTION	CABLE	ENTRY P	ORTS MPG	TR TYPE	AYS QTY*	GROUND LUGS	FLAME RETARDANT	UPC NUMBER
2178-XSB-0G-0T	Butt splice closure, no GND, no tray	0	3	0	N/A	0	0	-	051115-16219
2178-XSB/FR-0G-0T	Flame retardant butt splice closure, no GND, no tray	0	3	0	N/A	0	0	Х	051115-16221
2178-XSB-EG-0T	Butt splice closure, GND (2 lugs), no tray	0	3	0	N/A	0	2	-	051115-19003
2178-XSB-EG-0T-6PGA	Butt splice closure, GND (2 lugs), no tray, MPG (6 port flat cable grommet)	0	3	1	N/A	0	2	-	051115-19024
2178-XSB-EG-1T-6PGA	Fiber optic splice closure, GND (2 lugs), 1 2532 tray, MPG (6 port flat cable grommet)	0	3	1	2532	1	2		051115-19025
2178-XSB-EG-1T	Butt splice closure, GND (2 lugs), 1 2532 tray	0	3	0	2532	1	2	-	051115-19026
2178-XSB-EG-OTH	Butt splice closure, GND, no tray (hinged tray capability)	0	3	0	N/A	0	2	-	051115-22717
2178-S	Butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	-	051138-57777
2178-S/4 LUG	Butt/inline splice closure, GND (4 lugs), no tray	4	2	0	N/A	0	4	-	051138-19060
2178-S/FR	Flame retardant, butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	Х	051138-70841
2178-S+81	Butt/inline splice closure, GND (2 lugs), no tray, 1 2181 cable addition kit	8	4	0	N/A	0	2	-	051115-19238
2178-LS	Butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	-	051138-57778
2178-LS/4 LUG	Butt/inline splice closure, GND (4 lugs), no tray	4	2	0	N/A	0	4	-	051138-75383
2178-LS/FR	Flame retardant, butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	Х	051138-70840
2178-LS+81	Butt/inline splice closure, GND (2 lugs), no tray, 1 2181 cable addition kit	8	4	0	N/A	0	2	-	051115-19128
2178-LL	Butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	-	051138-57926
2178-LL/FR	Flame retardant, butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	Х	051138-70842
2178-LLC/FR	Flame retardant, butt/inline splice closure, GND (2 lugs), no tray	4	2	0	N/A	0	2	х	051138-87312
2178-XL	Butt/inline splice closure, no GND, no tray	8	4	0	N/A	0	0	-	051138-88927
2178-XL/FR	Flame retardant, butt/inline splice closure, no GND, no tray	8	4	0	N/A	0	0	х	051138-88929

SPLICE TRAYS		
PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION	
2170 PKG (LBS.): 50 EACH (0.10) MIN. ORDER: 50 EACH JPC: 054007-17676	Fiber Optic Splice Sleeve, 3.0mm x 60mm Transparent plastic tube and stainless steel rod designed to prevent stress and protect fusion fiber optic splices in field and factory operations.	
2171 PKG (LBS.): 50 EACH MIN. ORDER: 50 EACH JPC: 054007-14547	Fiber Optic Splice Sleeve, 2.4mm x 60mm Transparent plastic tube and stainless steel rod designed to prevent stress and protect fusion fiber optic splices in field and factory operations.	(
2519 PKG: 10 KITS MIN. ORDER: 10 KITS JPC: 051138-57722	Cable Fanout Kit Transitions cable buffer tubes or single tube to fiber tube.	(
2519-X PKG: 10 KITS MIN. ORDER: 10 KITS JPC: 051138-57723	Cable Fanout Expander Kit Transitions one fiber tube to two fiber tubes.	(
25 20 PKG (LBS.): 50 EACH (0.90) MIN. ORDER: 50 EACH JPC: 051138-36414	Fiber Tube Transition Tubing, 1 ft Protects single or ribbon fiber between trays; cut in one-foot lengths.	(
25 20-3FT PKG (LBS.): 24 EACH (1.50) MIN. ORDER: 24 EACH JPC: 051138-36647	Fiber Tube Transition Tubing, 3 ft Protects single or ribbon fiber between trays; cut in three-foot lengths.	(
25 21-F PKG (LBS.): 12 PKGS. (0.55) MIN. ORDER: 12 PKGS. JPC: 051138-36412	Fusion Splice Insert, 2 Pack Holds 12 single fusion splices in each insert, used in 3M Fiber Splice Organizer Trays 2522/2523.	(
25 21-FL PKG (LBS.): 12 (0.40) MIN. ORDER: 12 PKGS. JPC: 051138-36413	3M [™] Fibrlok [™] Splice Insert, 2 Pack Holds six Fibrlok or mass fusion splices in each insert, used in 2522/2523 trays.	(
25 21-MF PKG (LBS.): 12 PKGS. (0.50) MIN. ORDER: 12 PKGS. JPC: 051138-36411	Fibrlok Multi-Fiber Splice Insert, 2 Pack Holds four multi-fiber splices in each insert, used in 2522/2523 trays.	(
2521-RF PKG (LBS.): 12 PKGS. (1.00) MIN. ORDER: 12 PKGS. IPC: 051138-36415	Ribbon Fusion Splice Insert, 2 Pack Holds five ribbon fusion splices in each insert, used in 2522/2523 trays.	(

3M™ SPLICE CLOSURE 2178 ACCESSORIES

SPLICE TRAYS (CON'T)

PRODUCT NUMBER/ PACKAGING INFO DESCRIPTION

2522

PKG (LBS.): 2 EACH (2.00) MIN. ORDER: 2 EACH UPC: 051138-36522 **Small Fiber Splice Organizer Tray**

Holds two 3M Splice Inserts 2521 Family.*

The 2522 tray stores and protects discrete and mass, mechanical and fusion splices. The 2521 family splice inserts are easily added to secure splices into the trays. Fibers are routed into the trays using $3M^{\!\scriptscriptstyle{>\!\!|>\!\!|}}$ Transition Tubing 2520 that zips over the fibers.

*Splice inserts must be ordered separately.



2522-24-DF

PKG (LBS.): 2 EACH (2.00) MIN. ORDER: 2 EACH UPC: 051115-19149 Small Fiber Splice Organizer Tray

Holds 24 single fusion splices.



2523

PKG (LBS.): 2 EACH (2.67) MIN. ORDER: 2 EACH UPC: 051138-36523 Large Fiber Splice Organizer Tray Holds four 2521 family splice inserts.*

The 2523 tray stores and protects discrete and mass, mechanical and fusion splices. The 2521 inserts are easily added to secure splices into the trays. Fibers are routed into the trays using 2520 tubing that zips over the fibers.

*Splice inserts must be ordered separately.



2523-48-DF

PKG (LBS.): 2 EACH (2.67) MIN. ORDER: 2 EACH UPC: 051115-19145 Large Fiber Splice Organizer Tray Holds 48 single fusion splices.



2523-144-MF

PKG (LBS.): 2 EACH (2.67) MIN. ORDER: 2 EACH UPC: 051115-19146 Large Fiber Splice Organizer Tray

Holds 144 mass fusion splices.



PKG (LBS.): 2 EACH (1.87) MIN. ORDER: 2 EACH UPC: 051138-11514 **Splice Organizer Tray**

Holds 24 3M[™] Fibrlok[™] Splices and eight buffer tubes.



The 3M Fibrlok Splice Organizer Tray 2524 holds 24 Fibrlok splices. The 2524 tray can be adapted for fusion splice storage using the 2524F insert. Buffer tubes are secured with channel snaps so that cable ties are not required. The fibers all enter the tray in one corner eliminating the need for figure 8's in the fiber.

An important design feature of these stackable trays is the snap-on hinge cover on each tray. Individual trays may be accessed without disassembly of the trays above or below — and without kinking buffer tubes.



2524-F

PKG (LBS.): 24 EACH (0.40) MIN. ORDER: 24 EACH UPC: 054007-57150 **Fusion Splice Insert**

Adapts the 2524 tray for fusion splices.

Contains gasket and materials for installing additional cables and is flame retardant.

SPLICE TRAYS	G (CON'T)	
PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION	
2524-FT PKG (LBS.): 2 EACH (0.64) MIN. ORDER: 2 EACH UPC: 051138-11513	Fusion Splice Organizer Tray Holds 24 single fusion splices. The 3M™ Fibrlok™ Splice Organizer Tray 2524-FT holds up to 24 fusion splices. Buffer tubes are secured with channel snaps so that cable ties are not required. The fibers all enter the tray in one corner eliminating the need for figure 8's in the fiber. An important design feature of these stackable trays is the snap-on hinge cover on each tray. Individual trays may be accessed without disassembly of the trays above or below — and without kinking buffer tubes.	
2524-MF PKG (LBS.): 2 EACH (2.00) MIN. ORDER: 2 EACH UPC: 051138-34352	Fibrlok Multi-Fiber Splice Organizer Tray Holds three Fibrlok multi-fiber and four single Fibrlok splices.	
2526 PKG: 24 KITS MIN. ORDER: 24 KITS UPC: 051138-36648	Strap Kit for Organizer Trays Holds 2522 and 2523 trays in place in closure.	
2527 PKG: 2 EACH MIN. ORDER: 2 EACH UPC: 051138-89008	Fiber Splice Organizer Tray The 2527 tray accommodates up to 24 single fusion or 144 mass splices and has entry from all corners. It maintains the minimum bend radius of fiber. The tray has a clear cover and splice holders included.	24
2532 PKG: 2 EACH MIN. ORDER: 2 EACH UPC: 051115-16220	Fiber Splice Organizer Tray for 2178-XSB Closures Tray is stackable and accommodates 24 single and 72 mass fusion splices.	
2539-12-DF PKG: 2 EACH MIN. ORDER: 2 EACH UPC: 051115-19209	Fiber Optic Splice Tray w/12 Discrete Fusion Splices Hinged tray that accommodates 12 single fusion splices. Only for 2178-XSB Closures.	
2540-12-DF/36-MF PKG: 2 EACH MIN. ORDER: 2 EACH UPC: 051115-19210	Fiber Optic Splice Tray w/12 Discrete/72 Mass Fusion Hinged tray that that accommodates up to 12 single fusion and 36 mass fusion splices. Only for 2178-XSB Closures.	

3M™ SPLICE CLOSURE 2178 ACCESSORIES

EXPANSION PRODUCT NUMBER/ DESCRIPTION PACKAGING INFO **Strength Member Clamp for Fiber Cable** 2172 PKG: 100 EACH Clamps strength member to cable sheath. MIN. ORDER: 100 EACH UPC: 051138-36612 2178-LS/GSKT Gasket Kit for 2178-LS Family PKG (LBS.): 10 KITS (19.00) Replaceable gasket kit. MIN. ORDER: 10 KITS UPC: 051138-57929 Cable Branch Port Kit for 2178-XSB 2178-XSB-1.4B PKG: 5 EACH Single cable entry for 1.4" cable entry port. MIN. ORDER: 5 EACH UPC: 051115-19058 2178-4PGA **4-Port Grommet** PKG: 5 EACH For Corning cable SST-Drop cable, Pirelli, OFS and Sumitomo cable. For use with all 2178s. MIN. ORDER: 5 EACH UPC: 051115-19057 **6-Port Grommet** 2178-6PGA PKG: 5 EACH For Corning cable SST-Drop cable, Pirelli, OFS and MIN. ORDER: 5 EACH Sumitomo cable. For use only with the 2178-XSB UPC: 051115-19056 and 2178-XL. **Double Adapter Bolt Kit** PKG (LBS.): 1 KIT (1.20) Contains bolts for installation of two 3M Cable Addition MIN. ORDER: 1 KIT Kits 2181-LS. UPC: 054007-17678 **Triple Adapter Bolt Kit** PKG (LBS.): 1 KIT (1.20) Contains bolts for installation of three 2181-LS cable MIN. ORDER: 1 KIT addition kits. UPC: 054007-92597 **Cable Addition Kit** PKG (LBS.): 1 EACH (8.30) Contains gasket and materials for installing MIN. ORDER: 1 EACH additional cables. For use with 2178-LS family closures. UPC: 051138-57927 2181-LS/FR **Cable Addition Kit** PKG (LBS.): 1 EACH (8.00) Contains gasket and materials for installing additional cables MIN. ORDER: 1 EACH and is flame retardant. For use with 2178-LS family closures. UPC: 051138-75414

GROUNDING		
PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION	
2178-EGI PKG (LBS.): 5 EACH MIN. ORDER: 5 EACH UPC: 051138-57930	External Ground Isolation Kit Provides a means to ground each cable shield with waterproof isolation. The 2178-EGI housing can be used with any 2178-L/S and 2178-L/S-FR closures. Contents: two 2178-EGI housing assemblies and caps, two ground wire assemblies, two O-rings, two bolts and two 4460-O/FO shield bond connectors.	
25T-BBE6 PKG (LBS.): 1 EACH (3.00) MIN. ORDER: 1 EACH UPC: 054007-32671	Bond Braid With 6" eyelets.	
4460-D/FO PKG (LBS.): 100 EACH (7.95) MIN. ORDER: 100 EACH UPC: 054007-92757	3M [™] Scotchlok [™] Shield Bond Connector Assembly Provides grounding and strength and member clamp.	15.0

RODUCT NUMBER/ ACKAGING INFO	DESCRIPTION
2178-125 KG (LBS.): 8 EACH (5.00) MIN. ORDER: 8 EACH IPC: 054007-91019	Mastic Sealing Tape, Reenterable For use with splice closures 2178 and 2178-G.
2178-281 KG: 14 EACH IIN. ORDER: 14 EACH PC: 051138-58633	CORD Reenterable Mastic For use with splice closures 2178 and 2178-G.
180 (G (LBS.): 1 EACH (1.90) IN. ORDER: 1 EACH PC: 054007-17533	Cable Kit All materials required for re-entry into 2178 splice closure. Includes plugs, washers and sealing materials (mastic tape and cord). Contents: two plugs, two hose clamps, four green cable ties, four blue cable ties, one hex key, 48 sealing washers, one box sealing cord and one box sealing tape. For use only with 2178 classic.
181 G (LBS.): 1 EACH (14.00) N. ORDER: 1 EACH C: 051138-89321	Cable Addition Kit Contains mastic, cable adapter and materials for installing additional cables in 2178 and 2178-G splice closures. This kit permits butt splicing after initial plant construction. Contents: cover, cable adapter, three plugs, four hose clamps, four green cable ties, four blue cable ties, one spacer clamp assembly, one box sealing cord, one box sealing tape, ten bolts and eight sealing washer trees. For use only with 2178 classic.

MOUNTING HAP	RDWARE
PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION
2183-UHB PKG (LBS.): 1 KIT (1.10) MIN. ORDER: 1 KIT UPC: 051138-34602	Universal Aerial Hanger Bracket Kit Hardware for aerial installation of the 2178-LS family splice closures (S, LS, LL). The kit also accommodates the 2178 splice closure with one or two 3M Cable Addition Kits 2181. Contents: four nylon stop nuts, two corner inserts with studs, two universal hanger bracket assemblies.
2184 PKG: 1 KIT MIN. ORDER: 1 KIT UPC: 05115-19470	Adjustable Aerial Hanger Bracket Kit Adjustable aerial hanger bracket kit for the 2178-XSB, 2178-S and 2178-LS.
2197 PKG (LBS.): 1 KIT (1.60) MIN. ORDER: 1 KIT UPC: 054007-92222	Aerial Hanger Bracket Kit Contains hardware for aerial installation with hinged cover. For 2178-LS family splice closures (S, LS, LL). The kit also accommodates the 2178 splice closure with one or two 2181 cable addition kits. It provides additional hardware to attach the splice closure cover to its base. Contents: six corner inserts, 12 nuts, two flexible hinges, two "L" brackets, two bonding/hanger brackets and two bolts with washers.
2198 PKG: 1 KIT MIN. ORDER: 1 KIT UPC: 051138-36613	Wall Mount Bracket For use with 2178-XSB, 2178-S, 2178-LS, MS, M/LS and XL fiber closures.
2199 PKG (LBS.): 1 KIT MIN. ORDER: 1 KIT UPC: 051138-57928	Wall Mount Bracket For use with 2178-S, LS, LL and M/LL fiber closures.
AC-HB4 PKG (LBS.): 1 KIT (4.00) MIN. ORDER: 1 KIT UPC: 051115-19068	Aerial Offset hanger Bracket, 4.0" For overlashing application.

GENERAL		
PRODUCT NUMBER/ PACKAGING INFO	DESCRIPTION	
2178-L/S-T-INSERT PKG: 10 EACH MIN. ORDER: 1 PACK UPC: 051115-22714	Threaded Inserts Threaded inserts for the 2178-S, LS and LL splice closures.	
2178-L/S-375-BOLTS PKG: 10 EACH MIN. ORDER: 1 PACK UPC: 051115-22715	Cable Addition Bolts Bolts used with the 2181-LS cable addition kit.	
2178-L/S-248-BOLTS PKG: 10 EACH MIN. ORDER: 1 PACK UPC: 051115-22716	Standard Closure Bolts Bolts for the 2178-S, LS, LL, XSB and XL splice closures.	
4415 PKG (LBS.): 1 EACH (1.40) MIN. ORDER: 1 EACH UPC: 054007-57218	Cable Cleaning Kit Provides all the necessary materials for cleaning the filling compound from filled copper and fiber optic cables in an easy-to-transport kit.	
5025-KIT PKG (LBS.): 1 KIT (6.05) MIN. ORDER: 1 KIT UPC: 054007-34385	Reflective Lettering System Kit 1" x 3" lettering kit.	nini,
35-BL20 PKG (LBS.): 100 ROLLS (5.30) MIN. ORDER: 100 ROLLS UPC: 054007-10240	Scotch [®] Vinyl Electrical Tape, Blue Identify a cable pressure dam or meet specific color needs with 35 tape. 35 tape, 0.18 mm (7 mil), vinyl electrical tape holds firmly, yet has excellent stretch and conformability.	
35-GN2O PKG (LBS.): 100 ROLLS (5.25) MIN. ORDER: 100 ROLLS UPC: 054007-10265	Scotch® Vinyl Electrical Tape, Green Identify a cable pressure dam or meet specific color needs with 35 tape. 35 tape, 0.18 mm (7 mil), vinyl electrical tape holds firmly, yet has excellent stretch and conformability.	Man Man
Super 88 PKG (LBS.): 12 ROLLS (13.95) MIN. ORDER: 12 ROLLS UPC: 054007-10356	Scotch® Vinyl Electrical Tape Super 88 Tape is an 8.5 mil. heavy duty, premium grade all-weather vinyl insulating tape.	The state of the s
130C PKG (LBS.): 12 ROLLS (11.15) MIN. ORDER: 12 ROLLS UPC: 054007-41718	Scotch [®] Linerless Rubber Splicing Tape This rubber tape is highly conformable and is ideal for a number of applications where its sealing properties are required. These include sealing collars, closure sealing, drop wire splice insulating, sheath build-up and constructing auxiliary sleeves. Unlike many rubber tapes, 130C tape is linerless which can make it easier and quicker to use. It provides a void-free, permanent seal every time.	- Control of the Cont

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