



## 3M™ Fibrlok™ Optical Splice System

The 3M™ Fibrlok™ Optical Splice is one of the leading mechanical splices and is now specified in fiber-to-the-premises projects as a substitute for fusion splicing. It provides a precise, simple, and low-cost method of splicing single and multiple optical fibers without any electrical power. The Fibrlok splicing system is designed to minimize the need for lengthy training, specialized skills or experience. Whether your application is aerial, buried, underground or pedestal; outside plant or inside building; Fibrlok splicing is the ideal solution.

### 3M™ Fibrlok™ Single Fiber Optical Splicing System 2500 Series

The 3M™ Fibrlok™ Single Fiber Optical Splicing System 2500 Series is designed to easily splice any combination of 250 or 900 micron coated fibers with inexpensive tooling and no electrical power. Fibrlok single fiber optical splices utilize a metallic splicing element held inside a molded plastic body and cap to provide a fast, permanent splice. Index matching gel at the fiber splice interface helps enable a low-loss splice that maintains transmission quality over the life of the network. Assembly of the inexpensive Fibrlok splice requires only removal of the fiber coating, cleaning and cleaving of the fiber.

3M offers three different configurations of single fiber splices to meet different application needs: Fibrlok II splicing for 250  $\mu\text{m}$  or 900  $\mu\text{m}$  fibers, Fibrlok 250  $\mu\text{m}$  for splicing 250  $\mu\text{m}$  fibers and Fibrlok II Splice/Holder which eliminates the need for a separate assembly tool by integrating the Fibrlok II splice, tool and tray together.

### 3M™ Fibrlok™ Multi-Fiber Optical Splicing System 2600 Series

The 3M™ Fibrlok™ Multi-fiber Optical Splicing System 2600 is designed to splice up to 12 fibers in less than five minutes. The Fibrlok multi-fiber optical splicing system uses field proven Fibrlok single splice technology to provide fast, efficient and permanent splicing of multiple optical fibers. Splices are available in 4-, 8-, and 12-fiber versions.



3M™ Fibrlok™ II Universal Optical Fiber Splice 2529

### 3M™ Fibrlok™ II Universal Optical Fiber Splice 2529

The 2529 optical fiber splice has successfully spliced combinations of 250  $\mu\text{m}$  and 900  $\mu\text{m}$  singlemode or multimode fibers for over 15 years. Utilizing the rugged, low cost 3M™ Fibrlok™ Assembly Tool 2501, the 2529 splice can be installed in most indoor or outdoor applications.



3M™ Fibrlok™ II Splice/Holder 2539

### 3M™ Fibrlok™ II Splice/Holder 2539

The 2539 splice/holder integrates the 3M Fibrlok II splice 2529, actuation tool, and holder all in one package. It helps enable fast, on-site installation without a separate assembly tool or splice tray. 3M™ VHB™ Tape on the bottom of the splice/holder permanently holds it at the splice location. The Fibrlok II splice/holder is also available with a pre-terminated SC/APC or SC/UPC pigtail for easy installation.



3M™ Fibrlok™ 250  $\mu\text{m}$  Fiber Splice 2540G

### 3M™ Fibrlok™ 250 $\mu\text{m}$ Fiber Splice 2540G

The 2540G splice helps enable fast, easy splicing of 250  $\mu\text{m}$  singlemode and multimode fiber for most splice installations, including fiber-to-the-premises. Using the small, rugged 3M™ Fibrlok™ Assembly Tool 2504G, it can be installed in almost any environment, whether it is an aerial application or inside a building.



3M™ Fibrlok™ II Angle Fiber Splice 2529-AS

### 3M™ Fibrlok™ II Angle Fiber Splice 2529-AS

The 2529-AS splice was designed for the splicing of combinations of 250  $\mu\text{m}$  and 900  $\mu\text{m}$  fibers. The Fibrlok angle splices help enable fast, on-site installation of fiber with  $<-60$  dB optical reflection across temperature extremes for excellent analog video transmission performance.



3M™ Fibrlok™ 250  $\mu\text{m}$  Angle Fiber Splice 2540-AS

### 3M™ Fibrlok™ 250 $\mu\text{m}$ Angle Fiber Splice 2540-AS

The 2540-AS splice specifically splices 250  $\mu\text{m}$  fiber with a smaller form factor. The 2540-AS angle fiber splice helps enable fast, on-site installation with  $<-60$  dB optical reflection across temperature extremes for excellent analog video transmission performance.

## Features and Benefits

### 3M™ Fibrlok™ Single Fiber Optical Splices

< 0.1 dB insertion loss	High performance, permanent splices
30 second installation time	Increased productivity
Minimum tooling requirements	Low capital cost
No epoxy or electricity required	Easy on-site installation
Simple, easy to use	Minimal training, lower installed cost
Strong fiber retention	No fiber movement
Keyed, angle cleave splice	Low reflection, <-60dB across temperature extremes



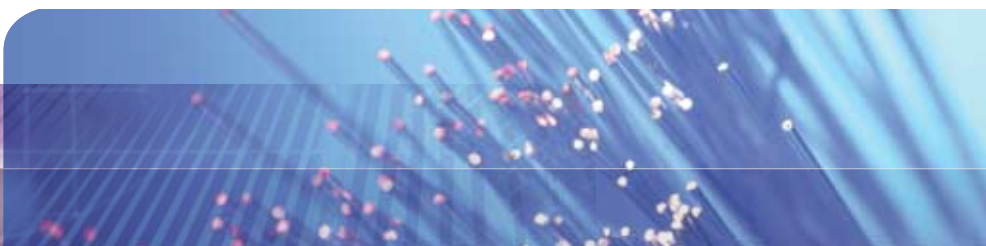
3M™ Fibrlok™ Angle Splice Assembly Tool 2501-AS

## 3M™ Fibrlok™ Single Fiber Optical Splices Specifications

Product Number	2529/2529-AS	2539	2540G/2540-AS
<b>Dimensions</b>	3.8 mm x 6.4 mm x 38.1 mm (0.15" x 0.25" x 1.50")	12.9 mm x 12.0 mm x 66.0 mm (0.51" x 0.47" x 2.60")	4 mm x 4 mm x 36 mm (0.16" x 0.16" x 1.42")
<b>Fiber diameter</b>	125 µm	125 µm	125 µm
<b>Coating diameter</b>	250 or 900 µm	250 or 900 µm Tight Buffer	250 µm
<b>Installation time</b>	< 30 seconds after fiber preparation	< 30 seconds after fiber preparation	< 30 seconds after fiber preparation
<b>Mean insertion loss</b>	< 0.1 dB	< 0.1 dB	< 0.1 dB
<b>Return loss</b>	2529: <-40 dB Typical 2529-AS: < -60 dB	< -40 dB Typical	2540G: <-40 dB Typical 2540-AS: < -60 dB
<b>Tensile strength</b>	4.4N (1.0 lbf) Minimum	4.4N (1.0 lbf) Minimum	4.4N (1.0 lbf) Minimum
<b>Operating temperature</b>	-40°C to 75°C (-40°F to 167°F)	-40°C to 75°C (-40°F to 167°F)	-40°C to 75°C (-40°F to 167°F)
<b>Material</b>	Engineering thermoplastic with aluminum alloy element & index matching gel	Engineering thermoplastic with aluminum alloy element, index matching gel & VHB tape	Engineering thermoplastic with aluminum alloy element & index matching gel

## 3M™ Fibrlok™ Single Fiber Optical Splices Ordering Information

Product Number	Description	Packaging	Min. Order	UPC
<b>Splices</b>				
2529	Fibrlok II Universal Optical Fiber Splice for 250 and 900 µm fiber	6/pkg. 10 pkg/cs.	60 each	054007-92202
2529-K	Fibrlok II 2529 Splices with Assembly Tool (60 splices, one 2501 assembly tool)	1 kit/cs.	1 kit	054007-92415
2539	Fibrlok II Splice/Holder, integrated actuation tool, and holder with tape	1/pkg. 60 pkg/cs.	60 each	051115-21516
2539-SC/APC	Fibrlok II Splice/Holder with 0.75 m (30") SC/APC connector pigtail	1/pkg. 12 pkg/cs.	12 each	051115-22860
2539-SC/UPC	Fibrlok II Splice/Holder with 0.75 m (30") SC/UPC connector pigtail	1/pkg. 12 pkg/cs.	12 each	051115-22861
2540G	Fibrlok 250 µm Fiber Splice for 250 µm fiber	5/pkg. 12 pkg/cs.	60 each	051115-22685
2529-AS	Fibrlok II Angle Fiber Splice	60/package	60 each	051115-26179
2540-AS	Fibrlok 250 µm Angle Fiber Splice	60/package	60 each	051115-32313
<b>Assembly Tools</b>				
2501	Required for Fibrlok II 2529	1/cs.	1 each	054007-57125
2504G	Required for Fibrlok 250 µm 2540G	1/cs.	1 each	051115-22686
2501-AS	Required for Fibrloks 2529-AS and 2540-AS	1/cs.	1 each	051115-25849





3M™ Fibrlok™ Splice Kit with Cleaver 2559-C



3M™ Cleaver 2534



3M™ Fiber Optic Angle Cleaver Kit 2565 includes 3M™ Fiber Optic Angle Cleaver 2535, 3M™ Fibrlok™ Angle Splice Assembly Tool 2501-AS and all tools necessary for 3M™ Fibrlok™ Angle Splices.

## 3M™ Fibrlok™ Splice Kits

The 3M Fibrlok Splice Kits for flat splices are available with (2559-C) and without (2559) a fiber cleaver and contain all the materials needed to terminate 3M™ Fibrlok™ Splices whether it be a singlemode or multimode splice. Detailed instructions are provided. Also included in the kits are the 3M™ Fibrlok™ II Assembly Tool 2501 and 3M™ Fibrlok™ 250 μm Assembly Tool 2504G, simple-to-use tools designed for fast and easy installation.

### The 3M™ Fibrlok™ Splice Kit 2559-C contains:

- 2501 assembly tool for 3M™ Fibrlok™ II Splice 2529
- 2504G assembly tool for 3M™ Fibrlok™ 250 μm Splice 2540G
- 3M™ Fiber Cleaver 2534 (not included in 2559 kit)
- 3M™ Fiber Stripping Tool 6365-ST
- 3M™ Kevlar Snips (scissors) 6365-KS
- Lint free cloths (100/pkg.)
- Cleaning alcohol bottle
- 3M™ Fibrlok™ II splice 2529 (6 each)
- 3M™ Fibrlok™ 250 μm 2540G (5 each)
- 3M™ Fibrlok™ II Splice/Holder 2539 (2 each)

The 3M™ Fiber Optic Angle Cleaver Kit 2565 provides all the tools to terminate the 3M Fibrlok Angle Splice 2529-AS and 2540-AS. Also included in the kits are the 3M™ No Polish Connector Assembly Tools 8865-AT and 8835-AT for terminating SC and LC angle splice connectors. Replacement parts are available.

## 3M™ Fibrlok™ Splice Kits and Accessories Ordering Information

Product Number	Description	Packaging	Minimum Order	UPC
<b>Kits</b>				
2559-C	Fibrlok Splice Kit with fiber cleaver	1/cs.	1 each	051115-25801
2559	Fibrlok Splice Kit without fiber cleaver	1/cs.	1 each	051115-25800
2565	Fiber Optic Angle Cleave Kit with angle cleaver	1/cs.	1 each	051115-29968
<b>Replacements for 3M Fibrlok Splice Kit</b>				
2501	Assembly tool required for Fibrlok II splice 2529	1/cs.	1 each	054007-57125
2504G	Assembly tool required for Fibrlok 250 μm 2540G	1/cs.	1 each	051115-22686
2534	Fiber cleaver	1/cs.	1 each	051115-30001
6365-ST	Stripping tool	1/cs.	1 each	051115-16200
6365-KS	Kevlar snips	1/cs.	1 each	051115-16202
05-00017	Lint free cloths	100/pkg.	1 pkg.	054007-48999
2535	Fiber optic angle cleaver	1/cs.	1 each	051115-29969
2501-AS	Fibrlok Angle Splice assembly tool	1/cs.	1 each	051115-25849