

Communication Markets Division

# 3M™ Fibrlok™ Splices

## Make virtually any-kind, anywhere fiber connections.

Indoor and outdoor. 250 µm singlemode/900 µm multimode, mixed and matched. 3M Fibrlok splices 2529 offer enhanced versatility for fiber connections in a variety of settings:

- **Wireless** – secures stable connections at the Base Band Unit, Remote RF Unit or in-building DAS.
- **Outside Plant** – convenient for cabinets, terminals, and other closures. Mounts discreetly inside.
- **Structured Cabling** – augment riser cable or POL with permanent splices.
- **Fiber-to-the-home** – mount in a Network Integrated Device outside of a building or secure the last meter of fiber pigtail inside the living unit.

Using a metallic splicing element held inside a molded plastic body and cap, Fibrlok splices provide a fast and permanent fiber connection. Index matching gel helps enable a low loss optical performance that helps maintain



3M™ Fibrlok™ II Universal Optical Fiber Splice 2529



3M™ Fibrlok™ II Fiber Splice Holder 2539  
\*(3M™ Fibrlok™ II Universal Optical Fiber Splice 2529 Sold Factory-installed)

Features	Benefits
< 0.1 dB typical insertion loss	High performance, permanent splices
Minimum tooling requirements	Low capital cost
No epoxy or electricity required	Easy field installation
Simple, easy to use	Minimal training, lower total cost of install
Wide operating temperature range	Ideal for indoor and outdoor splicing applications
Small form factor of 2540G	Suitable for 250 µm fiber splicing in a fiber closure

signal transmission quality. Plus, the 3M™ Fibrlok™ Splice assembly process requires only few steps in addition to standard fiber preparation: just properly position the cleaved fiber strains and actuate the splice with a simple tool.

From network rehabilitations to new constructions, the mechanical splices are a strong asset. Fibrlok splices provide a secure, permanent solution for repairs. When rolling out a new network, their fast installation time and minimal, non-electric tooling can keep your project moving without upfront capital investments on tooling such as fusion splice machines.

3M first introduced Fibrlok splices to the market more than two decades ago and now the v-groove precision-splicing technology is widely used in the industry. Today, Fibrlok splices include a full product family of splices and accessories including flat splices: 2529 and 2540G, angle splices: 2529-AS and 2540-AS, and adhesive-backed flat splice holder 2539.

### 3M™ Fibrlok™ Splices Family Overview

Product Name	Flat/Angle Cleave	Fiber Size	Key Application Tool	Dimensions	Full Installation Kit with blade cleaver
2529	Flat	250/900 µm	2501	3.8 mm x 6.4 mm x 38.1 mm (0.15" x 0.25" x 1.50")	2559-C
2529-AS	Angled	250/900 µm	2501-AS	3.8 mm x 6.4 mm x 38.1 mm (0.15" x 0.25" x 1.50")	2565
2540G	Flat	250 µm	2504G	4 mm x 4 mm x 36 mm (0.16" x 0.16" x 1.42")	2559-C
2540-AS	Angled	250 µm	2501-AS	4 mm x 4 mm x 36 mm (0.16" x 0.16" x 1.42")	2565
2539	Flat	250/900 µm	Not needed	Dimension with splice holder: 12.9 mm x 12 mm x 66 mm (0.51" x 0.47" x 2.6")	2559-C

### 3M™ Fibrlok™ Splices Specifications

Product Number	2529	2539	2540G
Fiber diameter	125 µm	125 µm	125 µm
Coating diameter	250 or 900 µm	250 or 900 µm Tight Buffer	250 µm
Insertion loss (dB) Typical	< 0.1	< 0.1	< 0.1
Reflectance (dB) Typical	<-55	<-55	<-55
Reflectance over operating temperature range	<-35	<-35	<-35
Operating temperature range	-40°C to 75°C	-40°C to 75°C	-40°C to 75°C
Storage temperature	-40°C to 75°C	-40°C to 75°C	-40°C to 75°C

### 3M™ Fibrlok™ Angle Splices Specifications

Product Number	2529-AS	2540G-AS
Fiber diameter	125 µm	125 µm
Coating diameter	250 µm and 900 µm	250 µm
Insertion loss (db) Typical	< 0.1	< 0.1
Reflectance (dB) Typical	<-65	<-65
Reflectance over operating temperature range	<-60	<-60
Operating temperature range	-40°C to 70°C	-40°C to 70°C
Storage temperature	-40°C to 70°C	-40°C to 70°C

### 3M™ Fibrlok™ Splices Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
<b>Splices</b>				
2529	Fibrlok II Universal Optical Fiber Splice for 250 and 900 µm fiber	6/pkg. 10 pkg/cs.	60 each	80-6107-5589-6
2529-AS	Fibrlok II Angle Fiber Splice	60/package	60 each	80-6113-2737-2
2540G	Fibrlok 250 µm Fiber Splice for 250 µm fiber	5/pkg. 12 pkg/cs.	60 each	JE-4200-9482-1
2540-AS	Fibrlok 250 µm Angle Fiber Splice	60/package	60 each	JE-4200-8435-0
2539	Fibrlok II Splice/Holder, integrated actuation tool, and holder with tape	1/pkg. 60 pkg/cs.	60 each	80-6113-2005-4
<b>Assembly Tools</b>				
2501	Required for Fibrlok II Splice 2529	1/cs.	1 each	80-6105-8187-0
2504G	Required for Fibrlok Splice 250 µm 2540G	1/cs.	1 each	JE-4200-8318-8
2501-AS	Required for Fibrlok Splices 2529-AS and 2540-AS	1/cs.	1 each	80-6113-2424-7
2506	Fibrlok™ II Cap-lifter Tool	1/cs.	25 each	80-6107-4784-4

## 3M™ Fibrlok™ Installation Kits

Product Number	Description	Packaging	Min. Order	3M ID
2559	Splice Kit without cleaver	1/cs.	1 each	80-6113-2375-1
2559-C	Splice Kit with Cleaver	1/cs.	1 each	80-6113-2376-9
2565	Angle Splice Kit with Angle Cleaver	1/cs.	1 each	80-6113-2508-7



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



3M™ Fiber Optic Angle Cleaver Kit 2565

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