

3M™ Fiber Interconnect Solutions



The Network of Networks

# High Performance Fiber Connections





# The future is fiber.

## And 3M fiber interconnect solutions are leading the way.

### **A complete family of high-performance products.**

3M meets the increasing demand for speed and reliability with a wide variety of innovative solutions. Choose from a broad range of ferruled fiber connectors and adapters, mechanical splices, cable assemblies and accessories designed for the interconnection of fiber optic networks. 3M provides a full line of singlemode and multimode LC, SC, ST and FC connectors. 3M™ Hot Melt Connectors, 3M™ Crimplok™ Connectors and 3M™ No Polish Connectors are very popular among contractors and installers because of their reliability and ease of use. And the 3M™ Crimplok™+ line is the first-known, commercially available,

field-mounted connector for FTTX indoor and outdoor use with no splice, no gel and no adhesive. The 3M™ Fibrlok™ Optical Splice is one of the leading mechanical splices and is now specified in fiber-to-the-home projects as a substitute for fusion splicing. Develop a high-performance network with 3M fiber interconnect solutions.

### **Connect with 3M experience.**

With more than 70 years of adhesive expertise, 40 years of ceramic technology leadership, 30 years of fiber optic experience, and 100 years of cumulative telecom experience, 3M provides an ideal offering of convenient, reliable and easy-to-install connectors for fiber networks.

### **A full line of products from a full-service company.**





3M is an innovation company. Our products, systems and services are optimized for constructing and rehabilitating networks for faster, more reliable performance. That means delivering products that conform to industry standards and that are as reliable as they are intermateable. 3M maintains a strong reputation for service by collaborating with other industry leaders to develop meaningful goals and standards. We strive to exceed those standards in everything we do.



# Selecting the Right Connector or Splice

The first step in the selection process is to determine whether a field installable connector or a mechanical splice will best meet your needs.



		Pros	Cons
Splice	Mechanical 	Fast installation Low tooling cost Easy to use	Higher part cost Slightly higher loss No field testing
	Fusion 	Low insertion loss and reflection Low material cost	High equipment cost Requires power Higher skill level required
Connector	Factory-terminated 	No tooling required Very easy to install Plug-n-play	Higher cost Cable management issue Replacement of damaged connectors
	Field-terminated 	Custom cable installation Low inventory costs Easy to install Lower material costs	Slightly higher loss Tooling required Some skill required

# 3M™ Field Installable Connectors

3M offers a complete line of fiber connectors with ceramic ferrules. Our 3M™ Hot Melt Connectors, 3M™ Crimplok™ Connectors, 3M™ Crimplok™+ Connectors and 3M™ No Polish Connectors (NPCs) are popular among contractors because of their reliability and ease of use. 3M field installable connectors maximize termination yield through ease of mounting and high performance installation tools. 3M field installable connectors are available in SC, LC, ST and FC product families. 3M also provides field installable FC/APC, SC/APC and LC/APC angle polish connectors.



3M™ Fiber Connector Family

## Fiber Connector Selection Charts

3M Connector	LC		SC		ST		FC	
	250/900 μm	Jacketed	250/900 μm	Jacketed	250/900 μm	Jacketed	250/900 μm	Jacketed
Crimplok+			✓					
No Polish	✓	✓	✓	✓	✓			
Hot Melt	✓	✓	✓	✓	✓	✓	✓	✓
Crimplok			✓	✓	✓	✓		
Epoxy			✓	✓	✓	✓	✓	✓

3M Connector	Installation Method	Performance*	Application	Recommended connectors installed per location†	Tools Required	Tool Price	Connector Price	Training Required
Crimplok+	Crimp and field polish	Outdoor wide temperature range	Service provider/ enterprise cabling	Less than 10	Quality cleaver/ Nano finisher/ Install tool provided	\$\$\$	\$\$\$	\$
No Polish	Mechanical splice with gel/ no field polish	Outdoor wide temperature range	Service provider/ enterprise cabling	Less than 10	Quality cleaver/ Install tool provided	\$\$\$	\$\$\$	\$
Hot Melt	Pre-loaded adhesive/ field polish	Controlled environment	Enterprise cabling	Greater than 10	Electric oven/ Polish tools	\$\$\$	\$\$	\$\$
Crimplok	Crimp and field polish	Controlled environment	Enterprise cabling	Less than 10	Scribe and actuator/ Polish tools	\$\$	\$\$	\$\$
Epoxy (2-part)	Field inject adhesive/ field polish	Outdoor wide temperature range	Cable assembly house	Greater than 100	Adhesive syringe/ Polish tools	\$\$	\$	\$\$\$
Epoxy (Anaerobic)	Field inject adhesive/ field polish	Controlled environment	Enterprise cabling	Greater than 10	Adhesive syringe/ Polish tools	\$\$	\$	\$\$\$

\* Outdoor wide temperature range meets Telcordia standards of -40°C to 75°C (-40°F to 167°F). Controlled environment meets TIA 568B.3 requirements for structured cabling.

† 3M™ No Polish Connectors, 3M™ Crimplok™+ Connectors, and 3M™ Crimplok™ Connectors use mechanical technology that is quick to set up to install a few connectors. 3M™ Hot Melt Connectors and 3M™ Epoxy Connectors installation processes are optimal for a larger number of connectors installed at one location.

# 3M™ Crimplok™+ Connectors

3M™ Crimplok™+ Connectors provide fast, easy field installation of 250 μm and 900 μm singlemode and multimode fiber without a splice, gel or adhesive.

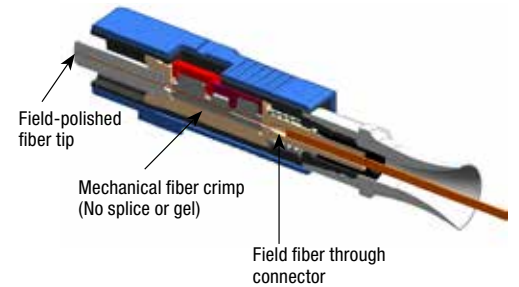
The connectors are SC compatible with a metallic element that mechanically locks the fiber in place. To install, the fiber is cleaved, inserted through the connector and locked in place using the 3M™ Crimplok™+ Protrusion Setting Tool and the fiber tip polished with the 3M™ Crimplok™+ Nano Finishing Tool. This hand tool utilizes a polishing film and an orbital mechanism that polishes with a single turn of the handle. Once completed, the connector is cleaned and ready for use.

Crimplok+ Connectors have a thermally balanced design that is tested for premises and FTTP applications for indoor and outdoor conditions from -40°F to 167°F. The connectors have a streamlined boot attached to the body, minimizing the chance of losing or forgetting to install it during the termination process. After installation, the boot helps keep the fiber from kinking, even during side pull.

The Crimplok+ Connectors and Tools are RoHS compliant.\*



3M™ Crimplok™+ Connector Family



## Features and Benefits

3M™ Crimplok™+ Connectors	
No splice, gel or adhesive	Eliminates splice interface/potential optical loss point
Simple assembly tools	Fast, easy installation without electrical power
Thermally balanced design	Excellent optical performance from -40°F to 167°F
Polishing film with every connector	Always have new polishing film
One-piece, pre-assembled design	No small, loose parts
Field installation	Always the right cable length with no cable slack to store
SC/APC angle polish	Low reflection, <-60 dB for outdoor temperatures





### 3M™ Crimplok™ + Connector Ordering Information

Product Number	Description	Packaging	Min. Order	UPC
8700-UPC	Crimplok+ Connector SC/UPC SM 250/900 µm	12/package	12 each	80-6113-8067-8
8700-PS/UPC	Crimplok+ Connector SC/UPC SM 250/900 µm with Protrusion Setting Tool	60/package	60 each	80-6113-8750-9
8700-APC	Crimplok+ Connector SC/APC SM 250/900 µm	12/package	12 each	80-6113-8068-6
8700-PS/APC	Crimplok+ Connector SC/APC SM 250/900 µm with Protrusion Setting Tool	60/package	60 each	80-6113-8751-7
6700-50	Crimplok+ Connector SC MM 50 µm 250/900 µm	12/package	12 each	80-6114-7902-5
6700-PS/50	Crimplok+ Connector SC MM 50 µm 250/900 µm with Protrusion Setting Tool	60/package	60 each	80-6114-7905-8
6700-50/LOMMF	Crimplok+ Connector SC MM 50 µm LOMMF 250/900 µm	12/package	12 each	80-6114-7903-3
6700-PS/50/LOMMF	Crimplok+ Connector SC MM 50 µm LOMMF 250/900 µm with Protrusion Setting Tool	60/package	60 each	80-6114-7906-6
6700-62.5	Crimplok+ Connector SC MM 62.5 µm 250/900 µm	12/package	12 each	80-6114-7904-1
6700-PS/62.5	Crimplok+ Connector SC MM 62.5 µm 250/900 µm with Protrusion Setting Tool	60/package	60 each	80-6114-7907-4

### 3M™ Crimplok™ + Connector SC Series Specifications

Product Number	Multimode			Singlemode	
	6700-50	6700-50/LOMMF	6700-62.5	8700-UPC	8700-APC
<b>Reflection (dB)</b> Typical	<-30	<-30	<-25	<-40	<-65
<b>Insertion loss (dB)</b> Typical	0.2	0.2	0.2	0.2	0.2
<b>Connector durability, after 500 matings</b>	<0.1 dB change	<0.1 dB change	<0.1 dB change	<0.2 dB change	<0.2 dB change
<b>Operating temperature</b>	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-40°C to 75°C (-40°F to 167°F)	-40°C to 75°C (-40°F to 167°F)
<b>Cable tension (in service)</b>					
Straight pull	<0.1 dB increase at 5N (1.1 lb) for 900 µm*	<0.1 dB increase at 5N (1.1 lb) for 900 µm*	<0.1 dB increase at 5N (1.1 lb) for 900 µm*	<0.5 dB increase at 6.9N (1.54 lb) for 900 µm*	<0.5 dB increase at 6.9N (1.54 lb) for 900 µm*
Side pull	<0.1 dB increase at 2N (0.4 lb) for 900 µm	<0.1 dB increase at 2N (0.4 lb) for 900 µm	<0.1 dB increase at 2N (0.4 lb) for 900 µm	<0.5 dB increase at 6.9N (1.54 lb) for 900 µm	<0.5 dB increase at 6.9N (1.54 lb) for 900 µm
<b>Housing/Boot color</b>	Black/White	Aqua/White	Beige/White	Blue/White	Green/White
<b>Material</b>					
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and body	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin
<b>Boot</b>	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94V-0	UL-94V-0	UL-94V-0	UL-94V-0	UL-94V-0
<b>Protusion setting tool</b>	8765-PS/UPC	8765-PS/UPC	8765-PS/UPC	8765-PS/UPC	8765-PS/APC
<b>Nano finishing tool</b>	8765-NF/UPC	8765-NF/UPC	8765-NF/UPC	8765-NF/UPC	8765-NF/APC
<b>Field termination kit</b>	8765-UPC	8765-UPC	8765-UPC	8765-UPC	8765-APC

\* Connectors tested under load.



3M™ No Polish SC Connector Family



3M™ No Polish LC Connector Family



3M™ No Polish SC (left) and LC Connector for Jacketed Cable



3M™ No Polish ST Connector Family

## 3M™ No Polish Connectors (NPC)

3M No Polish Connectors help enable fast, on-site installation of 250  $\mu\text{m}$  and 900  $\mu\text{m}$  singlemode and multimode fiber utilizing a one-piece, pre-assembled design that eliminates field polishing and loose parts. For jacketed bend-insensitive fiber cable, the SC and LC No Polish Connectors can be installed without an assembly tool.

A twist-on boot clamps onto the cable jacket and aramid fiber to provide excellent strain relief. It is ideal for FTTP drop terminations as well as LAN structured cabling backbone, and fiber-to-the-enclosure applications. With a factory-polished ferrule assembly and a mechanical splice, the connector can be quickly installed — without electrical power — using a simple field tool that is included in every box of 60 connectors (when required).

For excellent mechanical performance, the NPC has internal gripping elements for the strain relief of the 900  $\mu\text{m}$  buffer along with a unique, bell-shaped boot. The boot is attached to the connector body, minimizing the chance of losing or forgetting to install it during the termination process. After installation, the boot helps keep the fiber from kinking, even during side pull. For jacketed cable, a twist-on, hard shell boot clamps onto the cable jacket and aramid fiber to provide excellent strain relief.

The SC/APC and LC/APC compatible connectors are available with a standard, flat splice configuration or with a keyed, angle splice for excellent back reflection of  $<-60$  dB across temperature extremes. To maximize installation yield, the splice in the connector can be opened and reused with a cap lifter. The assembly tool and cap lifter are included in every box of 60 connectors (when required).

## Features and Benefits

3M™ No Polish Connectors	
Field installation	Right cable length with no cable slack to store
Simple assembly tool	Fast, easy installation
900 $\mu\text{m}$ buffer/cable jacket strain relief	Excellent pull out strength
Factory-polished fiber stub in ferrule	No on-site polish or adhesives required
Keyed, angle cleave splice for APC	Low reflection, $<-60$ dB across temperature extremes
Reusable	Maximize installation yield

### 3M™ No Polish LC Connector Specifications

Connector Type	Multimode			Singlemode		
	LC	LC	LC	LC	LC/APC	LC/APC
Product Number	6830-50	6830-50LOMMF	6830-62.5	8830	8830-APC/FS	8830-APC/AS
<b>Applications</b>	Data	Data	Data	Data, IPTV	Data, IPTV	Data, IPTV, Analog TV
<b>Shell color</b>	Black	Aqua	Beige	Blue	Green	Green
<b>Boot color</b>	White	White	White	White	White	Green
<b>Fiber type</b>	50 µm MM	50 µm 10 Gig MM	62.5 µm MM	SM	SM	SM
<b>Cleave</b>	Flat	Flat	Flat	Flat	Flat	Angle
<b>Assembly tool</b>	8835-AT	8835-AT	8835-AT	8835-AT	8835-AT	8835-AT
<b>Insertion loss (dB)</b> Typical	0.1	0.1	0.1	0.3	0.3	0.3
<b>Reflection (dB)</b> Typical	<-25	<-25	<-25	<-40	<-55	<-65
<b>Reflection (dB)</b> Max at -40°C to 75°C (-40°F to 167°F)	<-20	<-20	<-20	<-35	<-35	<-60
<b>Connector durability</b>	<0.2 dB after 500 matings	<0.2 dB after 500 matings	<0.2 dB after 500 matings	<0.2 dB after 200 matings	<0.2 dB after 100 matings	<0.2 dB after 100 matings
<b>Operating temperature</b> Connector only (cable dependent)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)
<b>Storage temperature</b>	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)
<b>Cable tension</b> Straight pull	<0.1 dB increase at 4.9N (1.1lb) for 900 µm*	<0.1 dB increase at 4.9N (1.1lb) for 900 µm*	<0.1 dB increase at 4.9N (1.1lb) for 900 µm*	<0.5 dB increase; 4.9N (1.1lb) for 250 µm & 6.9N (1.54lb) for 900 µm*	<0.5 dB increase; 4.9N (1.1lb) for 250 µm & 6.9N (1.54lb) for 900 µm*	<0.5 dB increase; 4.9N (1.1lb) for 250 µm & 6.9N (1.54lb) for 900 µm*
Side pull	<0.1 dB increase at 4.9N (1.1lb) for 900 µm	<0.1 dB increase at 4.9N (1.1lb) for 900 µm	<0.1 dB increase at 4.9N (1.1lb) for 900 µm	<0.1 dB increase at 4.9N (1.1lb) for 900 µm	<0.1 dB increase at 4.9N (1.1lb) for 900 µm	<0.1 dB increase at 4.9N (1.1lb) for 900 µm
<b>Material</b>						
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and body	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin
Boot	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0
<b>Field termination kit</b> (no power needed)	8865-C	8865-C	8865-C	8865-C	8865-C	2565
<b>Wavelengths (nm)</b>	850, 1300	850, 1300	850, 1300	1310, 1490, 1550, 1625	1310, 1490, 1550, 1625	1310, 1490, 1550, 1625
<b>Water immersion</b> 43°C (109°F), 3 days	—	—	—	<0.2 dB increase after 24 hour dry time	<0.2 dB increase after 24 hour dry time	<0.2 dB increase after 24 hour dry time

\*Connectors tested under load.

Note: The LC Multimode No Polish Connector meets EIA/TIA 568-B.3 and IEC requirements.



### 3M™ No Polish SC Connector Specifications

Connector Type	Multimode			Singlemode		
	SC	SC	SC	SC	SC/APC	SC/APC
Product Number	6800-50	6800-50LOMMF	6800-62.5	8800	8800-APC/FS	8800-APC/AS
<b>Applications</b>	Data	Data	Data	Data, IPTV	Data, IPTV	Data, IPTV, Analog TV
<b>Shell color</b>	Black	Aqua	Beige	Blue	Green	Green
<b>Boot color</b>	White	White	White	White	White	Green
<b>Fiber type</b>	50 µm MM	50 µm 10 Gig MM	62.5 µm MM	SM	SM	SM
<b>Cleave</b>	Flat	Flat	Flat	Flat	Flat	Angle
<b>Assembly tool</b>	8865-AT	8865-AT	8865-AT	8865-AT	8865-AT	8865-AT
<b>Insertion loss (dB)</b> Typical	0.2	0.2	0.2	0.3	0.3	0.3
<b>Reflection (dB)</b> Typical	<-30	<-30	<-25	<-40	<-55	<-65
<b>Reflection (dB)</b> Max at -40°C to 75°C (-40°F to 167°F)	<-20	<-20	<-20	<-35	<-35	<-60
<b>Connector durability</b>	<0.1 dB after 500 matings	<0.1 dB after 500 matings	<0.1 dB after 500 matings	<0.2 dB after 100 matings	<0.2 dB after 100 matings	<0.2 dB after 100 matings
<b>Operating temperature</b> Connector only (cable dependent)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)	-40°C to 75°C (-40 to 167°F)
<b>Storage temperature</b>	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)	-40°C to 85°C (-40 to 185°F)
<b>Cable tension</b> Straight pull	<0.1 dB increase at 2.2N (0.5lb) for 900 µm*	<0.1 dB increase at 2.2N (0.5lb) for 900 µm*	<0.1 dB increase at 2.2N (0.5lb) for 900 µm*	<0.1 dB increase; 4.9N (1.1lb) for 250µm & 6.9N (1.54lb) for 900 µm*	<0.5 dB increase; 6.9N (1.54lb) for 900 µm*	<0.5 dB increase; 6.9N (1.54lb) for 900 µm*
Side pull	<0.1 dB increase at 2.2N (0.5lb) for 900 µm	<0.1 dB increase at 2.2N (0.5lb) for 900 µm	<0.1 dB increase at 2.2N (0.5lb) for 900 µm	<0.5 dB increase; 2.2N (0.5lb) for 900 µm	<0.5 dB increase; 2.2N (0.5lb) for 900 µm	<0.5 dB increase; 2.2N (0.5lb) for 900 µm
<b>Material</b>						
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and body	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin
Boot	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0
<b>Field termination kit</b> (no power needed)	8865-C	8865-C	8865-C	8865-C	8865-C	2565
<b>Wavelengths (nm)</b>	850, 1300	850, 1300	850, 1300	1310, 1490, 1550, 1625	1310, 1490, 1550, 1625	1310, 1490, 1550, 1625
<b>Water immersion</b> 43°C (109°F), 3 days	—	—	—	<0.2 dB increase after 24 hour dry time	<0.2 dB increase after 24 hour dry time	<0.2 dB increase after 24 hour dry time

\*Connectors tested under load

Note: The SC Multimode No Polish Connector meets EIA/TIA 568-B.3 and IEC requirements.

### 3M™ No Polish Connector SC/UPC Jacket Specifications

Product Number	Multimode			Singlemode
	6802-T/50/1.6-3	6802-T/50/LOMMF/1.6-3	6802-T/62.5/1.6-3	8802-T/1.6-3
<b>Reflection (dB)</b> Typical	<-30	<-30	<-25	<-40
<b>Insertion loss (dB)</b> Typical	0.2	0.2	0.2	0.3
<b>Connector durability, after 500 matings</b>	<0.1 dB change	<0.1 dB change	<0.1 dB change	<0.1 dB change
<b>Operating temperature</b>	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-40°C to 75°C (-40°F to 167°F)
<b>Cable tension (jacket cable)</b>				
Straight pull	<0.1 dB increase at 50N (11.24 lb)*	<0.1 dB increase at 50N (11.24 lb)*	<0.1 dB increase at 50N (11.24 lb)*	<0.2 dB increase at 24.5N (5.5 lb)*
Side pull	<0.1 dB increase at 19.4N (4.4 lb)	<0.1 dB increase at 19.4N (4.4 lb)	<0.1 dB increase at 19.4N (4.4 lb)	
<b>Housing/Boot color</b>	Black/Black	Aqua/Black	Beige/Black	Blue/Black
<b>Material</b>				
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and boot	Engineered resin	Engineered resin	Engineered resin	Engineered resin
<b>Field termination kit</b>	8865-C	8865-C	8865-C	8865-C
*Connectors tested under load. Note: The SC Multimode No Polish Connector Jacket meets EIA/TIA 568-8.3. Compatible with SC mate standards.				

### 3M™ No Polish Connector LC/UPC Jacket Specifications

Product Number	Multimode			Singlemode
	6832-T/50/1.6-2	6832-T/50/LOMMF/1.6-2	6832-T/62.5/1.6-2	8832-T/1.6-2
<b>Reflection (dB)</b> Typical	<-30	<-30	<-25	<-40
<b>Insertion loss (dB)</b> Typical	0.2	0.2	0.2	0.3
<b>Connector durability, after 500 matings</b>	<0.1 dB change	<0.1 dB change	<0.1 dB change	<0.2 dB change
<b>Operating temperature</b>	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)
<b>Cable tension (jacket cable)</b>				
Straight pull	<0.1 dB increase at 33.4N (7.5 lb)	<0.1 dB increase at 33.4N (7.5 lb)	<0.1 dB increase at 33.4N (7.5 lb)	<0.2 dB increase at 33.4N (7.5 lb)
Side pull	<0.1 dB increase at 12.9N (2.9 lb)	<0.1 dB increase at 12.9N (2.9 lb)	<0.1 dB increase at 12.9N (2.9 lb)	<0.2 dB increase at 12.9N (2.9 lb)
<b>Housing/Boot color</b>	Black/White	Aqua/White	Beige/White	Blue/White
<b>Material</b>				
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and boot	Engineered resin	Engineered resin	Engineered resin	Engineered resin
<b>Field termination kit</b>	8865-C	8865-C	8865-C	8865-C
Note: The LC No Polish Connector Jacket meets EIA/TIA 568-8.3.				

### 3M™ No Polish ST Connector Specifications

Product Number	Multimode			Singlemode
	6840-50	6840-50/LOMMF	6840-62.5	8840
<b>Reflection (dB)</b> Typical	<-30	<-30	<-25	<-40
<b>Insertion loss (dB)</b> Typical				
@ 1300 nm	0.2	0.2	0.2	—
@ 1310, 1490, 1550, 1625 nm	—	—	—	0.3
<b>Connector durability, after 500 matings</b>	<0.1 dB change	<0.1 dB change	<0.1 dB change	<0.2 dB change
<b>Operating temperature</b>	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)	-10°C to 60°C (14°F to 140°F)
<b>Cable retention (900 µm buffered fiber)*</b>				
Straight pull	<0.1 dB Δ IL at 5 N (1.12 lbf)	<0.1 dB Δ IL at 5 N (1.12 lbf)	<0.1 dB Δ IL at 5 N (1.12 lbf)	<0.1 dB Δ IL at 5 N (1.12 lbf)
Side pull 90°	<0.1 dB Δ IL at 2 N (.45 lbf)	<0.1 dB Δ IL at 2 N (.45 lbf)	<0.1 dB Δ IL at 2 N (.45 lbf)	<0.1 dB Δ IL at 2 N (.45 lbf)
<b>Housing/Boot Color</b>	Black/White	Aqua/White	Beige/White	Blue/White
<b>Material</b>				
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and body	Engineered resin	Engineered resin	Engineered resin	Engineered resin
<b>Boot</b>	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94-V-0	UL-94-V-0	UL-94-V-0	UL-94-V-0
<b>Field Termination Kit</b>	8865-C	8865-C	8865-C	8865-C
*Measurements taken before and after loading. Note: The ST No Polish Connector meets EIA/TIA 568-8.3.				

### 3M™ No Polish ST Connector Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
6840-50	No Polish ST Connector MM 50 µm, 250/900 buffer, 60 pack (black housing) with assembly tool	60/package	60 each	80-6113-9511-4
6840-50/12	No Polish ST Connector MM 50 µm, 250/900 buffer, 12 pack (black housing)	12/package	12 each	80-6113-9514-8
6840-50/LOMMF	No Polish ST Connector MM 50 µm LO, 250/900 buffer, 60 pack (aqua housing) with assembly tool	60/package	60 each	80-6113-9512-2
6840-50/LOMMF/12	No Polish ST Connector MM 50 µm LO, 250/900 buffer, 12 pack (aqua housing)	12/package	12 each	80-6113-9515-5
6840-62.5	No Polish ST Connector MM 62.5 µm, 250/900 buffer, 60 pack (beige housing) with assembly tool	60/package	60 each	80-6113-9513-0
6840-62.5/12	No Polish ST Connector MM 62.5 µm, 250/900 buffer, 12 pack (beige housing)	12/package	12 each	80-6113-9516-3
8840	No Polish ST Connector SM, 250/900 buffer, 60 pack (blue housing) with assembly tool	60/package	60 each	80-6113-9517-1
8840/12	No Polish ST Connector SM, 250/900 buffer, 12 pack (blue housing)	12/package	12 each	80-6113-9518-9
8845-AT	No Polish ST Connector Assembly Tool	1 each	1 each	80-6113-9519-7

### 3M™ No Polish SC and LC Connector Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
6800-50	MM No Polish SC Connector 50 µm	1/bag, 60/carton	60 each	80-6113-2623-4
6800-50/LOMMF	MM No Polish SC Connector 50 µm laser optimized	1/bag, 60/carton	60 each	80-6113-2624-2
6800-62.5	MM No Polish SC Connector 62.5 µm	1/bag, 60/carton	60 each	80-6113-2625-9
6830-50	MM No Polish LC Connector 50 µm	1/bag, 60/carton	60 each	80-6113-2773-7
6830-50/LOMMF	MM No Polish LC Connector 50 µm laser optimized	1/bag, 60/carton	60 each	80-6113-2774-5
6830-62.5	MM No Polish LC Connector 62.5 µm	1/bag, 60/carton	60 each	80-6113-2775-2
8800	SM No Polish SC/UPC Connector	1/bag, 60/carton	60 each	80-6113-2622-6
8800-APC/AS	SM No Polish SC/APC Connector angle splice	1/bag, 60/carton	60 each	80-6113-2627-5
8800-APC/FS	SM No Polish SC/APC Connector flat splice	1/bag, 60/carton	60 each	80-6113-2626-7
8830	SM No Polish LC/UPC Connector	1/bag, 60/carton	60 each	80-6113-2776-0
8830-APC/AS	SM No Polish LC/APC Connector angle splice	1/bag, 60/carton	60 each	80-6113-2777-8
8830-APC/FS	SM No Polish LC/APC Connector flat splice	1/bag, 60/carton	60 each	80-6113-2778-6
8835-AT	No Polish LC Connector Assembly Tool	1 each	1 each	80-6113-2797-6
8865-AT	No Polish SC Connector Assembly Tool	1 each	1 each	80-6113-2630-9

Note: MM - Multimode; SM - Singlemode; LOMMF - Laser Optimized Multimode Fiber (OM3)  
Every carton of 60 connectors contain the appropriate assembly tool.

### 3M™ No Polish Connector LC/UPC Jacket Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
8832-T/1.6-2	No Polish LC/UPC Connector SM 50 µm 1.6-2.0 mm Jacket	60/package	60 each	80-6113-9839-9
6832-T/50/1.6-2	No Polish LC/UPC Connector MM 50 µm 1.6-2.0 mm Jacket	60/package	60 each	80-6113-9840-7
6832-T/50/LOMMF/1.6-2	No Polish LC/UPC Connector MM 50 µm LOMMF 1.6-2.0 mm Jacket	60/package	60 each	80-6113-9841-5
6832-T/62.5/1.6-2	No Polish LC/UPC Connector MM 62.5 µm 1.6-2.0 mm Jacket	60/package	60 each	80-6113-9842-3
8802-FUR/900	No Polish Connector Furcation Tube for 900 µm fiber (100/bag)	600/package	600 each	80-6113-9845-6

### 3M™ No Polish Connector SC/UPC Jacket Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
6802-T/50/1.6-3	No Polish SC/UPC Connector MM 50 µm 1.6-3.0 mm Jacket	60/package	60 each	80-6113-9828-2
6802-T/50/LOMMF/1.6-3	No Polish SC/UPC Connector MM 50 µm LOMMF 1.6-3.0 mm Jacket	60/package	60 each	80-6113-9829-0
6802-T/62.5/1.6-3	No Polish SC/UPC Connector MM 62.5 µm 1.6-3.0 mm Jacket	60/package	60 each	80-6113-9830-8
8802-FUR/900	No Polish SC Connector Furcation Tube for 900 µm fiber (100/bag)	600/package	600 each	80-6113-9845-6
8802-T/1.6-3	No Polish SC/UPC Connector SM 1.6-3.0 mm Jacket	60/package	60 each	80-6113-3507-8

# 3M™ Easy Cleaver

## Available in select packages of 3M connectors and splices

The 3M™ Easy Cleaver is the latest 3M fiber cleaving tool innovation enabling simple installation and lower up-front CapEx when terminating all 3M flat-cleave, field-installable connectors and splices. Unlike other blade-enabled fiber cleaving tools, the 3M™ Easy Cleaver requires no maintenance because of its diamond wire cleaving mechanism. The 3M™ Easy Cleaver is capable of creating smooth end faces repeatedly and designed to perform 120 cleaves per tool.

The cleaver is available only with select packages of 3M™ No Polish Connectors, 3M™ Crimplok™+ Connectors and 3M™ Fibrlok™ II Splices. See the ordering chart for specific details on packaging.



3M™ Easy Cleaver



3M™ Easy Cleaver

## Features and Benefits

3M™ Easy Cleaver	
<b>Life cycle counter</b>	Conveniently helps users to keep track of cleaver life
<b>Diamond wire shuttle</b>	No maintenance or blade rotation required, which reduces downtime
<b>Innovative fiber clamp design</b>	Provides precise and repeatable cleaves
<b>Strip and cleave length markings</b>	Clear indication of specified strip lengths for 3M connector and splice installations
<b>Lightweight and durable</b>	Suitable for both indoor and outdoor work environments

## Specifications

Feature	
<b>Dimensions</b>	133 x 68 x 29.5 mm (5.24 x 2.68 x 1.16 in) approx.
<b>Weight</b>	62 gm (2.2 oz) approx.
<b>Compatible fibers</b>	
<b>Buffered</b>	250 µm / 900 µm tight buffer
<b>Jacketed Cable</b>	Up to 3 mm
<b>Drop Cable</b>	1.6 x 2 mm and 2 x 3 mm FRP
<b>Cleave angle</b>	Typically less than 3°
<b>Cleave lengths</b>	8 - 24 mm (Specific cleave length markings are 8, 10, 12.5, 19, 20 and 24 mm)
<b>Strip lengths</b>	42 - 58 mm
<b>Cleaver life</b>	Approximately 120 cleaves*
<b>Performance</b>	Flat cleave: 3M field-installable connectors and splices perform to their individual specifications when terminated with the 3M™ Easy Cleaver.

## Cleave Length Guide

3M Products	Cleave Length (mm)	Fiber Strip length (mm)
3M™ No Polish Connectors	8	42
3M™ Fibrlok™ II Splices	12.5	46
3M™ Crimplok™+ 250 µm Connectors	19	52
3M™ Crimplok™+ 900 µm Connectors	24	58



### 3M™ Easy Cleaver Ordering Information

Product Number	Description	3M ID	Packaging	Min. Order
<b>3M™ No Polish Connectors</b>				
8800-APC/FS/C	SM No Polish SC/APC Connector flat splice with Easy Cleaver	80-6114-9412-3	120 each per box	120 each
8800/C	SM No Polish SC/UPC Connector with Easy Cleaver	80-6114-9411-5	120 each per box	120 each
8802-T/1.6-3/C	SM No Polish SC/UPC Connector 1.6-3.0 mm Jacket with Easy Cleaver	80-6114-8225-0	120 each per box	120 each
8802-T/APC/FS/1.6-3/C	SM No Polish SC/APC Connector 1.6-3.0 mm Jacket flat splice with Easy Cleaver	80-6114-8226-8	120 each per box	120 each
6800-50/C_60	MM No Polish SC Connector 50 µm with Easy Cleaver	80-6114-9419-8	60 each per box	60 each
6800-50LOMMF/C_60	MM No Polish SC Connector 50 µm laser optimized with Easy Cleaver	80-6114-9420-6	60 each per box	60 each
6800-62.5/C_60	MM No Polish SC Connector 62.5 µm with Easy Cleaver	80-6114-9421-4	60 each per box	60 each
6802-T/50/1.6-3/C_60	MM No Polish SC/UPC Connector 50 µm 1.6-3.0 mm Jacket with Easy Cleaver	80-6114-9422-2	60 each per box	60 each
6802-T/50LOMMF/1.6-3/C_60	MM No Polish SC/UPC Connector 50 µm LOMMF 1.6-3.0 mm Jacket with Easy Cleaver	80-6114-9423-0	60 each per box	60 each
6802-T/62.5/1.6-3/C_60	MM No Polish SC/UPC Connector 62.5 µm 1.6-3.0 mm Jacket with Easy Cleaver	80-6114-9424-8	60 each per box	60 each
8830-APC/FS/C	SM No Polish LC/APC Connector flat splice with Easy Cleaver	80-6114-9416-4	120 each per box	120 each
8830/C	SM No Polish LC/UPC Connector with Easy Cleaver	80-6114-9415-6	120 each per box	120 each
8832-T/1.6-2/C	SM No Polish LC/UPC Connector 50 µm 1.6-2.0 mm Jacket with Easy Cleaver	80-6114-9417-2	120 each per box	120 each
6830-50/C_60	MM No Polish LC Connector 50 µm with Easy Cleaver	80-6114-9425-5	60 each per box	60 each
6830-50LOMMF/C_60	MM No Polish LC Connector 50 µm laser optimized with Easy Cleaver	80-6114-9426-3	60 each per box	60 each
6830-62.5/C_60	MM No Polish LC Connector 62.5 µm with Easy Cleaver	80-6114-9427-1	60 each per box	60 each
6832-T/50/1.6-2/C_60	MM No Polish LC/UPC Connector 50 µm 1.6-2.0 mm Jacket with Easy Cleaver	80-6114-9428-9	60 each per box	60 each
6832-T/50LOMMF/1.6-2/C_60	MM No Polish LC/UPC Connector 50 µm LOMMF 1.6-2.0 mm Jacket with Easy Cleaver	80-6114-9429-7	60 each per box	60 each
6832-T/62.5/1.6-2/C_60	MM No Polish LC/UPC Connector 62.5 µm 1.6-2.0 mm Jacket with Easy Cleaver	80-6114-9430-5	60 each per box	60 each
8840/C	SM No Polish ST Connector 250/900 µm buffer, with assembly tool and Easy Cleaver	80-6114-9418-0	120 each per box	120 each
6840-50/C_60	MM No Polish ST Connector 50 µm, 250/900 µm buffer, with assembly tool and Easy Cleaver	80-6114-9431-3	60 each per box	60 each
6840-50LOMMF/C_60	MM No Polish ST Connector 50 µm LO, 250/900 µm buffer, with assembly tool and Easy Cleaver	80-6114-9432-1	60 each per box	60 each
6840-62.5/C_60	MM No Polish ST Connector 62.5 µm, 250/900 µm buffer, with assembly tool and Easy Cleaver	80-6114-9433-9	60 each per box	60 each
<b>3M™ Crimplok™ + Connectors</b>				
8700-PS/APC/C	3M Crimplok+ Connector SC/APC SM 250/900 µm with Protrusion Setting Tool and Easy Cleaver	80-6114-9435-4	120 each per box	120 each
8700-PS/UPC/C	3M Crimplok+ Connector SC/UPC SM 250/900 µm with Protrusion Setting Tool and Easy Cleaver	80-6114-9434-7	120 each per box	120 each
6700-PS/50/C_60	3M Crimplok+ Connector SC MM 50 µm 250/900 µm with Protrusion Setting Tool and Easy Cleaver	80-6114-9436-2	60 each per box	60 each
6700-PS/50LOMMF/C_60	3M Crimplok+ Connector SC MM 50 µm LOMMF 250/900 µm with Protrusion Setting Tool and Easy Cleaver	80-6114-9437-0	60 each per box	60 each
6700-PS/62.5/C_60	3M Crimplok+ Connector SC MM 62.5 µm 250/900 µm with Protrusion Setting Tool and Easy Cleaver	80-6114-9438-8	60 each per box	60 each
<b>3M™ Fibrlok™ II Universal Optical Fiber Splice</b>				
2529/C_60	3M Fibrlok II Universal Optical Fiber Splice for 250/900 µm fiber with Easy Cleaver	80-6114-9439-6	60 each per box	60 each

## 3M™ Hot Melt Connectors

3M Hot Melt Connectors come pre-loaded with advanced 3M hot melt adhesive. There is no need for epoxy mixing and application so the termination time averages just two minutes. The 3M hot melt connector's reliability, high performance and ease of use, in both indoor and outdoor LANs worldwide, have made it an industry favorite.

The 3M™ Hot Melt LC Connector in both singlemode and multimode has all the advantages of our pre-loaded hot melt technology — and at half the size of our SC connector. With its high-performance adhesive and precision-centered ferrule polishing, it meets TIA 568B.3 requirements for a broad range of applications.



3M™ Hot Melt SC Connector



3M™ Hot Melt LC Connector

### Features and Benefits

3M™ Hot Melt LC, SC, ST and FC Connectors	
Pre-loaded hot melt adhesive	Extended shelf life as compared to epoxy versions; fewer consumables (cost effective); no epoxy to mix; no syringe needed; shorter set-up time; no mess; no waste
No waiting for epoxy to cure	Termination in approximately two minutes increases productivity; short heat and cool cycle; saves time
Single-step polish for multimode	Only one abrasive to buy; faster polishing (cost effective)
Extended adhesive shelf life	Reduces outdated epoxy inventory and stock rotation requirements
Pre-radiused PC ferrule	Designed to provide contact of fibers; consistent performance
Zirconia ceramic ferrule	Durability; stability through temperature change; quality performance
Meets TIA/EIA 568-B.3 specifications	Rugged, reliable performance

### 3M Hot Melt Connector Specifications

Connector Type	Multimode				Singlemode			
	ST	FC	SC	LC	ST	FC	SC	LC
Product Number	6100	6200	6300	6600	8100YS	8200	8300	8600
Fiber size (µm)	125	125	125	125	125	125	125	125
Insertion loss (dB) Typical	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Reflection (dB) Typical	-25	-25	-25	-25	-40	-40	-40	-55
Connection durability (dB) Change after 500 matings	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Operating temperature Connector only (cable dependent)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)

### 3M™ Hot Melt Connector Specifications (continued)

Connector Type	Multimode				Singlemode			
	ST	FC	SC	LC	ST	FC	SC	LC
Product Number	6100	6200	6300	6600	8100YS	8200	8300	8600
<b>Storage temperature</b>	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)
<b>Cable tension</b>								
Straight pull	—	<0.5 dB increase at 20.5 lbs	<0.5 dB increase at 11.24 lbs.	—	—	<0.5 dB increase at 11.24 lbs.	<0.5 dB increase at 11.24 lbs.	—
Side pull	—	<0.5 dB increase at 3.0 lbs	<0.5 dB increase at 3 lbs.	—	—	<0.5 dB increase at 11.24 lbs.	<0.1 dB increase at 0.5 lbs. for 900 µm	—
<b>Testing specifications</b>	TIA*	TIA*	TIA*	TIA*	TIA*	TIA*	TIA*	TIA*
<b>Material</b>								
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing and body	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin	Engineered resin
Boot	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0
<b>Field termination kit</b>								
120 V	6366	6366	6366	+	6366	6366	6366	+
220 V	6362	6362	6362		6362	6362	6362	

\*TIA =v TIA/EIA 568-B.3; Telcordia GR-326-CORE

+ LC hot melt connectors require the 6650-LC expansion kit plus either the 6366 or 6362

### 3M Hot Melt Connector Ordering Information

Product Number	Description	Packaging	Min. Order	3M ID
6100-B	MM Hot Melt ST ceramic, black boot	1/bag, 60/carton	60 each	80-6111-2754-1
6100-R	MM Hot Melt ST ceramic, red boot	1/bag, 60/carton	60 each	80-6111-2755-8
6100-W	MM Hot Melt ST ceramic, white boot	1/bag, 60/carton	60 each	80-6111-2753-3
6200	MM Hot Melt FC ceramic, white boot	1/bag, 60/carton	60 each	80-6111-2758-2
6300-W	MM Hot Melt SC ceramic, white boot	1/bag, 60/carton	60 each	80-6111-2757-4
6600-S	MM Hot Melt LC simplex 900 BTW white boot	1/bag, 60/carton	60 each	80-6113-1429-7
6602-S	MM Hot Melt LC simplex 1.6-2.0 cable white boot	1/bag, 60/carton	60 each	80-6113-1349-7
6603-S	MM Hot Melt LC simplex 2.4-3.0 cable white boot	1/bag, 60/carton	60 each	80-6113-1430-5
6601-D	MM Hot Melt LC duplex 900 buffer white/beige boots	1/bag, 60/carton	60 each	80-6113-1431-3
6602-D	MM Hot Melt LC duplex 1.6-2.0 cable white/beige boots	1/bag, 60/carton	60 each	80-6113-1350-5
6603-D	MM Hot Melt LC duplex 2.4-3.0 cable white/beige boots	1/bag, 60/carton	60 each	80-6113-1432-1
6604-D	MM Hot Melt LC duplex 900 buffer red/black boots	1/bag, 60/carton	60 each	80-6113-1433-9
6605-D	MM Hot Melt LC duplex 1.6-2.0 cable red/black boots	1/bag, 60/carton	60 each	80-6113-1434-7
6606-D	MM Hot Melt LC duplex 2.4-3.0 cable red/black boots	1/bag, 60/carton	60 each	80-6113-1435-4
8100-YS	SM Hot Melt ST ceramic, yellow boot	1/bag, 60/carton	60 each	80-6111-2762-4
8200-W	SM Hot Melt FC ceramic, white boot	1/bag, 60/carton	60 each	80-6111-7612-6
8300	SM Hot Melt SC ceramic, white boot	1/bag, 60/carton	60 each	80-6111-2765-7
8600-S	SM Hot Melt LC simplex 900 BTW white boot	1/bag, 60/carton	60 each	80-6113-1436-2
8602-S	SM Hot Melt LC simplex 1.6-2.0 cable white boot	1/bag, 60/carton	60 each	80-6113-1351-3
8603-S	SM Hot Melt LC simplex 2.4-3.0 cable white boot	1/bag, 60/carton	60 each	80-6113-1437-0
8601-D	SM Hot Melt LC duplex 900 buffer white/beige boots	1/bag, 60/carton	60 each	80-6113-1438-8
8602-D	SM Hot Melt LC duplex 1.6-2.0 cable white/beige boots	1/bag, 60/carton	60 each	80-6113-1352-1
8603-D	SM Hot Melt LC duplex 2.4-3.0 cable white/beige boots	1/bag, 60/carton	60 each	80-6113-1439-6

Note: MM – Multimode; SM – Singlemode

# 3M™ Crimplok™ Connectors

3M™ Crimplok™ Connectors need no adhesive, providing the speed of non-adhesive connectors with the optical performance of 3M™ Hot Melt Connectors. 3M Crimplok connectors combine the speed of non-adhesive connectors with the performance to meet TIA 568B.3. By using proven malleable metal element fiber-gripping technology, these connectors are designed to be easily installed virtually anywhere without the need for electrical power. Termination time is less than one minute, making Crimplok connectors ideal for quick fiber connections to the desk.



3M™ Crimplok™ ST Connector

## Features and Benefits

3M™ Crimplok™ Connectors	
Non-adhesive, non-splice design	Clean and simple terminations
No tool set-up required	Improved efficiency
No waiting for epoxy to cure	Termination in less than one minute with fully prepared fiber
No power or electricity required	Installation practically anywhere
Meets TIA/EIA 568-B.3 specifications	Rugged, reliable performance

## 3M Crimplok Connector Specifications

Connector Type	Multimode		Singlemode	
	SC	ST	SC	ST
Product Number	6900	6901	8900	8901
Fiber size (µm)	125	125	125	125
Insertion loss (dB) Typical	<0.2	<0.2	<0.2	<0.2
Reflection (dB) Typical	-27	-25	-40	-40
Connector durability (dB) Change after 500 matings	<0.2	<0.3	<0.2	<0.3
Operating temperature	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)
Storage temperature	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 80°C (-40° to 176°F)	-40° to 85°C (-40° to 185°F)
Cable tension				
Straight pull	<0.5 dB increase at 11.24 lbs.	—	<0.5 dB increase at 11.24 lbs.	—
Side pull	<0.5 dB increase at 3 lbs.	—	<0.5 dB increase at 3 lbs.	—
Material				
Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing	Engineered resin	Thermoplastic polymer	Engineered resin	Thermoplastic polymer
Boot	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
Flame retardancy	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0
Connector identification	Black Body Beige Shell Black Boot	Black Body Beige Shell Beige Boot	Black Body Blue Shell Black Boot	Black Body Beige Shell Blue Boot
Field termination kit				
No power needed	6955	6955	6955	6955

## 3M Crimplok Connector Ordering Information

Product Number	Connector Type	Package	Minimum Order	3M ID
6900	MM Crimplok SC Connector ceramic	60/carton	60 each	80-6108-4525-9
6901	MM Crimplok ST Connector ceramic	60/carton	60 each	80-6108-4523-4
8900	SM Crimplok SC Connector ceramic	60/carton	60 each	80-6110-1257-8
8901	SM Crimplok ST Connector ceramic	60/carton	60 each	80-6110-1259-4

Note: MM - Multimode; SM - Singlemode

# 3M™ Epoxy Connectors

3M Epoxy Connectors feature a pre-radiused, zirconia ceramic PC ferrule designed to provide contact of fibers for low reflection and low insertion loss. The 3M epoxy SC and FC connectors are intermateable within NTT specifications. Singlemode epoxy connectors are tested to Telcordia GR-326-CORE. These connectors are built to exacting ferrule length tolerances for maximum machine polish yield and bulk packaged to maximize factory cable assembly efficiency. 3M Epoxy Connectors can also be used with an anaerobic adhesive for fast-cure interconnect applications.



3M™ Epoxy SC Connector

## Features and Benefits

### 3M™ Epoxy SC, ST and FC Connectors

Pre-radiused PC ferrule	Fiber centered in radius; improved performance; designed to provide contact of fibers; low reflection; consistent performance; excellent transmission performance
Zirconia ceramic ferrule	Durability; stability through temperature change; quality performance; reduces reflection problems; field polish $\leq$ -45 dB reflection (singlemode epoxy only)
Pull-proof (independent) ferrule	Designed to maintain optical contact (FC, SC)
High strength thermoplastic housing	Virtually eliminates flaking; resists corrosion (FC, SC)
Tested to Telcordia (SM)	Rugged and reliable long-term performance (FC,SC)





### 3M™ Epoxy Connector Specifications

Connector Type Product Number	Multimode			Singlemode			
	SC 6306	ST 6105	FC 6202	SC 8306	ST 8106	FC 8203	SC & FC/APC 8306   8206/ APC
<b>Fiber size (µm)</b>	125	125	125	126	126	126	126
<b>Insertion loss (dB)</b> Typical field mount @ 1300 nm	<0.2	<0.2	<0.2	<0.3	<0.3	<0.3	<0.2
<b>Reflection (dB)</b> Typical	-25	-25	-25	-45	-40	-45	-65
<b>Connection durability (dB)</b> Change after 500 matings	<0.2	<0.2 1000 matings	<0.2	<0.2	<0.2	<0.2	<0.2
<b>Operating temperature</b> Connector only (cable dependent)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)
<b>Storage temperature</b>	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)
<b>Cable tension</b> Straight pull	<0.5 dB increase at 11.24 lbs.	—	<0.5 dB increase at 20.5 lbs.	<0.5 dB increase at 11.24 lbs.	—	<0.5 dB increase at 20.5 lbs.	<0.5 dB increase at 20.5 lbs.
Side pull	<0.5 dB increase at 3 lbs.	—	<0.5 dB increase at 3 lbs.	<0.3 dB increase at 3 lbs.	—	<0.5 dB increase at 3 lbs.	<0.5 dB increase at 3 lbs.
<b>Testing specifications</b>	TIA*	TIA*	TIA*	Telcordia/TIA*	TIA*	Telcordia/TIA*	Telcordia/TIA*
<b>Material</b> Connector ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Connector housing & body	Engineered resin	Nickel plated zinc	Engineered resin	Engineered resin	Nickel plated zinc	Nickel plated zinc	Engineered resin
Boot	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer	Thermoplastic elastomer
<b>Flame retardancy</b>	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0	UL-94 V-0

\*Notes: TIA = TIA/EIA 568-B.3; Telcordia GR-326-CORE  
Specifications listed above based on a 2-part epoxy application.  
See "Termination Kits" section for 3M Epoxy Connector termination tools.

### 3M Epoxy Connector Ordering Information

Product Number	Connector Type	Package	Minimum Order	3M ID
6306	MM Epoxy SC Connector ceramic	1/bag, 60/carton	60 each	80-6107-6501-0
6105	MM Epoxy SC Connector ceramic	1/bag, 60/carton	60 each	80-6107-4705-9
6202	MM Epoxy SC Connector ceramic	1/bag, 60/carton	60 each	80-6107-6540-8
8306	SM Epoxy SC Connector ceramic	1/bag, 60/carton	60 each	80-6107-6498-9
8306-SC/APC	SM Epoxy SC/APC Connector ceramic	1/bag, 60/carton	60 each	80-6111-6899-0
8106	SM Epoxy ST Connector ceramic	1/bag, 60/carton	60 each	80-6103-1827-3
8203	SM Epoxy FC Connector ceramic	1/bag, 60/carton	60 each	80-6107-6537-4
8206-FC/APC	SM Epoxy FC/APC Connector ceramic	1/bag, 60/carton	60 each	80-6111-6900-6

Note: MM - Multimode; SM - Singlemode

# 3M™ Termination Kits

3M Termination Kits provide the tools and materials necessary to terminate the major fiber optic connectors in the industry today. Kits are available to meet your needs in terminating a variety of connectors.

## 3M™ Crimplok™ + Connector Kits

3M™ Crimplok™ + Connector Kits 8765-UPC/8765-APC provide the tools needed to terminate 3M Crimplok+ Connectors 8700-UPC 6700 and 8700-APC series, respectively. Both kits contain the same fiber preparation tools including a high quality cleaver, a work surface and a case with an integrated hook for easy hanging. Each kit contains a specific 3M™ Crimplok™ + Protusion Setting Tool and 3M™ Crimplok™ + Nano Finishing Tool, depending upon the connector type. UPC tools provide a square finish while APC tools provide a 8° angled finish.



3M™ Crimplok™ + SC/UPC Connector Kit 8765-UPC for 3M™ Crimplok™ + Connectors 8700-UPC and 6700 Series



3M™ Crimplok™ + SC/APC Connector Kit 8765-APC for 3M™ Crimplok™ + Connectors 8700-APC

## 3M™ Crimplok™ + Connector Kit Ordering Information

Product Number	Description	Packaging	3M ID
8765-UPC	Crimplok+ SC/UPC Connector Kit	1 kit	80-6113-8067-8
8765-APC	Crimplok+ SC/APC Connector Kit	1 kit	80-6113-8073-6

## Replacement Parts for 3M™ Crimplok™ + Connector Kits

Product Number	Description	Packaging	3M ID
8765-PS/UPC	Crimplok+ SC/UPC Protusion Setting Tool	1/package	80-6113-8074-4
8765-PS/APC	Crimplok+ SC/APC Protusion Setting Tool	1/package	80-6113-8095-9
8765-NF/UPC	Crimplok+ SC/UPC Nano Finishing Tool	1/package	80-6113-8075-1
8765-NF/APC	Crimplok+ SC/APC Nano Finishing Tool	1/package	80-6113-8096-7
2534	Fiber cleaver	1/package	80-6113-2377-7
6362-TH	Stripping tool	1/package	80-6113-3936-9
6365-KS	Fiber snips	1/package	80-6113-0462-9
8765-LFW	Crimplok+ lint-free wipes (60 count)	1/package	80-6113-8753-3
8765-CS	Crimplok+ cleaning swabs (100 count)	1/package	80-6113-8754-1

## 3M™ No Polish Connector Kits

3M™ No Polish Connector Kits provide the tools and materials needed to terminate singlemode and multimode SC and LC flat splice no polish connectors. The 3M™ No Polish Connector Premium Kit with Cleaver 8865-C/PR has the tools of the regular 8865-C kit, but in a larger case with a work surface, fiber shard container, tweezers, brush and lint-free wipes in a tub. The 3M™ Fiber Optic Angle Cleave Kit 2565 provides the tools necessary to terminate 3M™ No Polish LC/APC and SC/APC Angle Splice Connectors. The 3M™ Fibrlok™ Angle Splice Assembly Tool 2501-AS is also included to terminate 3M™ Fibrlok™ Angle Splices. Replacement parts are available.



3M™ Fiber Optic Angle Cleave Kit 2565



3M™ No Polish Connector Kit 8865-C



3M™ No Polish Connector Premium Kit with Cleaver 8865-C/PR

### 3M™ No Polish Connector Kit Ordering Information

Product Number	Description	Package	3M ID
8865-C	No Polish Connector Kit with cleaver	1 kit	80-6113-2379-3
8865	No Polish Connector Kit (no cleaver)	1 kit	80-6113-2378-5
8865-C/PR	No Polish Connector Premium Kit with cleaver	1 kit	80-6113-8783-0
2565	Fiber optic angle cleaver kit with angle cleaver	1 kit	80-6113-2508-7

### Replacement Parts for 3M™ No Polish Connector Kit

Product Number	Description	Package	3M ID
2534	Fiber Optic Cleaver	1 each	80-6113-2377-7
2535	Fiber Optic Angle Cleaver	1 each	80-6113-2423-9
8835-AT	No Polish LC Connector Assembly Tool	1 each	80-6113-2797-6
8845-AT	No Polish ST Connector Assembly Tool	1 each	80-6113-9519-7
8865-AT	No Polish SC Connector Assembly Tool	1 each	80-6113-2630-9
6362-TH	Stripping tool	1 each	80-6113-3936-9
6365-KS	Fiber snips	1 each	80-6113-0462-9
05-00017	Lint free cloths	100 sheets	80-6104-4324-6

## 3M™ Hot Melt Termination Kits

3M™ Hot Melt Termination Kits 6366 (120V oven) and 6362 (230V oven) contain the tools and materials necessary to terminate 3M™ Hot Melt SC, ST, and FC Connectors, both singlemode and multimode. The 3M™ LC Hot Melt Expansion Kit 6650-LC is used in addition to the 6366/6362 hot melt termination kits to terminate 3M™ Hot Melt LC Connectors.



3M™ Hot Melt Termination Kits 6366 and 6362-230V



3M™ Hot Melt LC Expansion Kit 6650-LC

### Features and Benefits

#### 3M™ Hot Melt Termination Kits

Microscope with oblique and coaxial lighting	Better dual view of fiber end face inspection
Roll-up tool pouch	Tools are organized and accessible
Universal hot melt holders	Fewer parts to carry, holds cable more securely
Instruction CD	Organized into video segments for quick reference

### 3M Hot Melt Termination Kit Ordering Information

Product Number	Description	Packaging	3M ID
6366	Hot Melt Termination Kit for ST, FC, SC Hot Melt Connectors, 120V	1 each	80-6113-2599-6
6362-230V	Hot Melt Termination Kit for ST, FC, SC Hot Melt Connectors, 230V	1 each	80-6113-2598-8
6650-LC	Hot Melt LC Expansion Kit	1 each	80-6113-1353-9

### 3M Hot Melt Accessories Ordering Information

Product Number	Description	Packaging	3M ID
6365-CC	<b>Hot Melt Consumable Kit for ST, SC, FC</b>	1 each	80-6113-0452-0
	Lapping film, 2 µm (254X)	200 sheets	
	Lapping film, (263X) final polish	50 sheets	
	Lint free cloth tub	200 sheets	80-6104-4324-6
8892 Universal Polishing Jig		1 each	80-6110-0932-7
6191	<b>Hot Melt Cooling Stand</b>	1 each	80-6106-2569-3
6650-LS	<b>LC Lapping Film Singlemode Consumable Kit (polishes 400 connectors)</b>	1 each	80-6113-1472-7
	Lapping film, 9 µm (461X)	20 sheets	
	Lapping film, 2 µm (254X)	100 sheets	
	Lapping film, 0.5 µm (661X)	40 sheets	
	Lapping film, final polish (863XW)	80 sheets	
6650-LM	<b>LC Lapping Film Multimode Consumable Kit (polishes 400 connectors)</b>	1 each	80-6113-1473-5
	Lapping film, 9 µm (461X)	20 sheets	
	Lapping film, 2 µm (254X)	100 sheets	

### 3M™ Hot Melt Termination Kit 6366/6362 Kit Components

Product Number	Description	Contents Qty.	Replacement MOQ	Package	3M ID
6312	120V 6-port oven with cooling plate (6366 Kit)	1	1	1	80-6111-6872-7
6323	230V 6-port oven with cooling plate (6362 Kit)	1	1 each	1	80-6111-6873-5
6365-HH	Universal connector holders, ST, SC, FC	6	1 pkg	4/pkg	80-6113-1476-8
6365-PP	Round polishing pad	2	1 each	1	80-6113-0456-1
6192-A	2 µm lapping film (pale green)	200	1 each	500/pkg	60-6500-2346-2
863XW-DISK	Final lapping film (frosted)	20	50	50/pkg	60-0200-0626-2
8892	Polishing jig	2	1	1	80-6110-0932-7
05-0002	Cable jacket stripper	1	1	1	80-6104-4314-7
6365-KS	Fiber snips	1	1	1	80-6113-0462-9
6362-TH	Stripping tool	1	1	1	80-6113-3936-9
6365-CT	Crimp tool	1	1	1	80-6113-0454-6
6365-FS	Fiber scribe	1	1	1	80-6113-0458-7
6365-VS	View scope (200X)	1	1	1	80-6113-0459-5
6366-CW	Cleaning wipes with dispenser	100/pkg	12 pkgs	100/pkg	80-6113-2618-4
	120V power cord (6366 Kit)	1	—	—	—
	230V UK power cord (6362 Kit)	1	—	—	—
	230V EU power cord (6362 Kit)	1	—	—	—
	3M™ Scotch-Weld™ adhesive	1	—	—	—
	Alcohol bottle (empty)	1	—	—	—
	Water bottle (empty)	1	—	—	—
	Fiber scrap can	1	—	—	—
	Roll up pouch	1	—	—	—
	Fiber marking pen	1	—	—	—
	Stripping template	1	—	—	—
	Training CD ROM	1	—	—	—
	Quick reference guide	1	—	—	—
	Instructions (paper)	1	—	—	—



3M™ Hot Melt Oven 6312



## 3M™ Crimplok™ Termination Kit

The Crimplok Termination Kit and accessories provide the tools and materials necessary to terminate 3M™ Crimplok™ Fiber Optic Connectors. Replacement parts are available.



3M™ Crimplok™ Kit 6955(components displayed)



3M™ Crimplok™ Kit 6955  
(components loaded in pouch)

### 3M Crimplok Termination Kit Ordering Information

Product Number	Description	Packaging	3M ID
6955	Crimplok termination kit	1 kit	80-6109-3664-5

### 3M Crimplok Accessories Ordering Information

Product Number	Product Description	Packaging	3M ID
6955-HSC	Scoring head, Crimplok SC	1 each	78-8073-7664-1
6955-HST	Scoring head, Crimplok ST	1 each	78-8073-7676-5
05-00251	Cleaning Wires, 12 pack	12/pkg.	80-6104-4345-1

### 3M Crimplok Termination Kit 6955 Kit Components

Product Number	Product Description	Contents Qty.	Replacement MOQ	Packaging	3M ID
SP-00503	Lapping film, Crimplok 2 μm (254x)	50	50	50 sheets	80-6108-4532-5
SM	Lapping film, Crimplok SM (263x)	50	50	50 sheets	80-6110-1312-1
6955-T	Activation tool, Crimplok with ST & SC scoring heads	1	1	1 each	80-6109-3662-9
6365-CT	Universal crimp tool	1	1	1 each	80-6113-0454-6
6955-P	Polishing tool, Crimplok	1	1	1 each	80-6109-3727-0
8892	Universal polishing jig	1	1	1 each	80-6110-0932-7
05-00002	Cable jacket stripper	1	1	1 each	80-6104-4314-7
6365-KS	Fiber snips	1	1	1 each	80-6113-0462-9
05-00017	Lint free cloths	100/pkg	1 pkg	100 sheets	80-6104-4324-6
	100x view scope	1	—	—	—
	Buffer stripper	1	—	—	—
	Alcohol bottle (empty)	1	—	—	—
	Water bottle (empty)	1	—	—	—
	Scotch® brand tape	1	—	—	—
6362-TH	Stripping tool	1	1	1 each	80-6113-3936-9

## 3M™ Epoxy Termination Tools

3M provides connectors with zirconia ceramic ferrules for use with two-part or anaerobic epoxy.

These very high quality connectors are ideal for use in factory assembly applications or in field-mount restorations where a broad temperature range and stringent performance standards are required. The following 3M materials are available to use with common termination tools available on the market.

It is important to use the proper syringe dispensing tip to assure proper placement of adhesives inside the connector ferrule and avoid overflow.

3M™ Epoxy SC/APC and FC/APC Connectors require the angle polishing puck included in the APC conversion kits.

### 3M™ Epoxy Termination Tools Ordering Information

Necessary and required for 3M connector design

Product Number	Description	Packaging	Min. Order	3M ID
05-00255	Syringe, 3 cc	25	25	80-6104-4347-7
FO-25DT	Dispensing tips (green)	1 pkg of 25	1 pkg of 25	80-6107-7441-8
6365-CT	Universal crimp tool	1	1	80-6113-0454-6
8365-PP	Soft polishing pad	1	1	80-6113-0457-9
261X-5S	FO Polish film 5 µm AL OC 4.5x5.5" SHT	500	500	60-0700-0508-1
262X-1S	FO Polish film 1 µm AL OC 4.5x5.5" SHT	500	500	60-0700-0507-3
661X-1.5S	FO Polish film 1.5 µm diamond 4.5x5.5" SHT	25	25	60-0700-0514-9

Recommended and available for cable preparation and connector finish

Product Number	Description	Packaging	Min. Order	3M ID
8892	Universal polishing jig	1	1	80-6110-0932-7
6365-FS	Carbide fiber scribe	1	1	80-6113-0458-7
6365-KS	Fiber snips	1	1	80-6113-0462-9
6362-TH	Stripping tool	1	1	80-6113-3936-9
6365-VS	200x view scope	1	1	80-6113-0459-5
6366-CW	Cleaning wipes with dispenser	12	12	80-6113-2618-4
05-00017	Lint free cloths 100-pack	1	1	80-6104-4324-6





## 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 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.



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	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-K	Fibrlok II 2529 Splices with Assembly Tool (60 splices, one 2501 assembly tool)	1 kit/cs.	1 kit	80-6107-5830-4
2539	Fibrlok II Splice/Holder, integrated actuation tool, and holder with tape	1/pkg. 60 pkg/cs.	60 each	80-6113-2005-4
2540G	Fibrlok 250 µm Fiber Splice for 250 µm fiber	5/pkg. 12 pkg/cs.	60 each	JE-4200-9482-1
2529-AS	Fibrlok II Angle Fiber Splice	60/package	60 each	80-6113-2737-2
2540-AS	Fibrlok 250 µm Angle Fiber Splice	60/package	60 each	JE-4200-8435-0
<b>Assembly Tools</b>				
2501	Required for Fibrlok II 2529	1/cs.	1 each	80-6105-8187-0
2504G	Required for Fibrlok 250 µm 2540G	1/cs.	1 each	JE-4200-8318-8
2501-AS	Required for Fibrloks 2529-AS and 2540-AS	1/cs.	1 each	80-6113-2424-7





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 also provided. 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 6362-TH
- 3M™ Fiber 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	3M ID
<b>Kits</b>				
2559-C	Fibrlok Splice Kit with fiber cleaver	1/cs.	1 each	80-6113-2376-9
2559	Fibrlok Splice Kit without fiber cleaver	1/cs.	1 each	80-6113-2375-1
2565	Fiber Optic Angle Cleave Kit with angle cleaver	1/cs.	1 each	80-6113-2508-7
<b>Replacements for 3M Fibrlok Splice Kit</b>				
2501	Assembly tool required for Fibrlok II splice 2529	1/cs.	1 each	80-6105-8187-0
2504G	Assembly tool required for Fibrlok 250 μm 2540G	1/cs.	1 each	JE-4200-8318-8
2534	Fiber cleaver	1/cs.	1 each	80-6113-2377-7
6362-TH	Stripping tool	1/cs.	1 each	80-6113-3936-9
6365-KS	Fiber snips	1/cs.	1 each	80-6113-0462-9
05-00017	Lint free cloths	100/pkg.	1 pkg.	80-6104-4324-6
2535	Fiber optic angle cleaver	1/cs.	1 each	80-6113-2423-9
2501-AS	Fibrlok Angle Splice assembly tool	1/cs.	1 each	80-6113-2424-7

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

The 2600 splice uses the same field-proven Fibrlok splice technology to provide fast, efficient and permanent splicing of multiple optical fibers. The Fibrlok multi-fiber splicing system consists of a consumable splice “module” and associated fiber preparation and splicing tools. Splices are available in 4-, 8-, and 12-fiber versions, for both fiber optic ribbon and “ribbonized” fibers, and can be assembled in less than five minutes. This makes the Fibrlok multi-fiber splice ideal for both new construction and cable restoration applications.



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

### Features and Benefits

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

3M proprietary metallic splice element	High performance, permanent
Simple splice actuation tool	Fast – fiber optic splices
Minimum tooling requirements	Lowers capital costs
Requires no epoxy or electricity	Helps enable easy on-site installation
Completes splice in less than five minutes	Ideal for both new construction and cable restoration applications
Integrated fiber splice element and protective cover	Fibers aligned precisely and permanently in place

## 3M™ Fibrlok™ Multi-Fiber Splice Preparation Kits

The 2600 splice preparation kit provides the components required to assemble the multi-fiber splice. The 3M™ Fibrlok™ Ribbon Construction Tool 2670 provides organization and “ribbonizing” of individual 250 µm coated fibers prior to splicing. The Fibrlok tooling is designed to minimize the required tooling investment.



3M™ Fibrlok™ Multi-Fiber Splice Preparation Kit 2600

### 3M Fibrlok Multi-Fiber Splice and Preparation Kit Ordering Information

Product Number	Description	Packaging	Minimum Order	3M ID
2600	Fibrlok Multi-Fiber Optical Splice Prep Kit	1/cs.	1 each	80-6106-1765-8
2604	Fibrlok Multi-Fiber Optical Splice (4-fiber)	1/pkg. 12 pkg./cs.	12 each	80-6106-1761-7
2608	Fibrlok Multi-Fiber Optical Splice (8-fiber)	1/pkg. 12 pkg./cs.	12 each	80-6107-4780-2
2612	Fibrlok Multi-Fiber Optical Splice (12-fiber)	1/pkg. 12 pkg./cs.	12 each	80-6106-1764-1
2620	Multi-fiber optical splice actuator tool	1/cs.	1 each	80-6106-1767-4
2670	Multi-fiber ribbon construction tool kit	1/cs.	1 each	80-6106-1788-0
2671	Fiber optic ribbon construction tape	1000/pkg.	1 pkg.	80-6107-4395-9
2631-A	Multi-fiber stripper wall plug transformer (230v)	1/cs.	1 each	xx-xxxx-xxxx-x
2635	Multi-fiber stripper tube guide (12-fiber, AT&T ASR ribbon)	1/cs.	1 each	80-6107-4795-0
2652-B	Multi-fiber cleaver spacer gauge assembly	1/cs.	1 each	80-6113-8416-7
2653	Multi-fiber holder assembly (12-fiber, AT&T ASR ribbon)	1/cs.	1 each	80-6107-7199-2
05-00017	Lint free cloths	100/pkg.	1 pkg.	80-6104-4324-6

## Expertise in your application.

3M products are high-quality, versatile, easy to install, and facilitate high-speed deployment – giving you a smarter total solution. For years, customers have relied on 3M fiber optics technologies to leverage existing infrastructure or to install completely new networks. 3M continues to develop new and innovative products to extend our breadth of line, and help improve your bottom line.

### The Network of Networks

The 3M Network of Networks is a world leader in communication technology, connecting products, people and companies by harnessing the power of more than 45 technology platforms to create customer-centric innovations. The Network of Networks connects smart grids to smart phones, datacenters to desktops, greenfield to brownfield, wireline to wireless and customers to their goals. To get the Network of Networks working for you, visit [3M.com/Telecom](http://3M.com/Telecom).

## 3M Fiber Optic Products

### Fiber Optic Splices and Connectors

- 3M™ Crimplok™+ SC Connectors
- 3M™ No Polish SC/LC/ST Connectors
- 3M™ No Polish SC and LC Connectors for Jacketed Cable
- 3M™ Hot Melt LC/SC/ST/FC Connectors
- 3M™ Crimplok™ SC/ST Connectors
- 3M™ Fibrlok™ Single-Fiber Optical Splicing System 2500 Series
- 3M™ Fibrlok™ Multi-Fiber Optical Splicing System 2600 Series
- 3M™ Fiber Connector Termination Kits and Accessories

### Fiber Optic Terminals and Closures

- 3M™ Fiber Dome Closures and Terminals
- 3M™ Fiber Optic Splice Case 2178 Series
- 3M™ Fiber Splice Closure System LL Series
- 3M™ SLiC™ Fiber Aerial Closures and Terminals

### Fiber Pathways

- 3M™ One Pass Fiber Pathway (Hallway)
- 3M™ One Pass Mini Fiber Pathway

### Fiber Distribution Terminals

- 3M™ Mini Cable Transition Box BTI
- 3M™ Sub-Compact Cable Transition Terminal CTB-FTB
- 3M™ Sub-Compact Fiber Distribution Terminal PBPOC 6-12
- 3M™ Sub-Compact Fiber Distribution Box PBPO 6-12
- 3M™ Compact Fiber Distribution Box PBO-T1

### Locating and Marking Products

- 3M™ Dynatel™ Locators 2200 Series
- 3M™ Dynatel™ Locators 2200M/M-iD Series
- 3M™ Dynatel™ Marker Locator 1420-iD Series
- 3M™ Electronic Marker System (EMS)

### Network Accessories

- 3M™ Fire Protection Products
- 3M™ Holding and Fastening Products
- 3M™ Identification Products
- 3M™ Reflective Tape
- 3M™ ScotchCode™ Marker and Label Products
- 3M™ and Scotch® Vinyl Electrical Tapes



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### Communication Markets Division

6801 River Place Blvd.  
Austin, TX 78726-9000  
800/426 8688  
Fax 800/626 0329  
[www.3M.com/Telecom](http://www.3M.com/Telecom)

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