# **3**M

# **Crimplok**™ Connectors

# Quick, easy installation and superior performance

To successfully design, install or operate today's fiber optic networks, you need components that offer speed and reliability – from the fiber itself all the way down to the connectors. That's why 3M developed a connector that combines the speed of non-adhesive connectors with the performance characteristics of epoxy and hot melt connectors. 3M™ Crimplok™ Connectors are the ideal solution for emergency restoration work or for quickly making fiber connections at the desk.

Crimplok connectors were designed to:

- Save time in installation
- Provide rugged, reliable performance, meeting or exceeding current EIA/TIA-568A specifications
- Install cleanly and simply with fewer parts and tools

#### Saves time

Available in both SC and ST\*, single-mode and multimode connector versions, Crimplok connectors are faster to install than epoxy connectors since there is no set-up or curing time. And Crimplok connectors do not require special heating tools or ovens, so time spent searching for electrical outlets is eliminated. Polishing the connector is also a simple process that can be performed in seconds.

# Provides reliable performance

The Crimplok connector incorporates proven 3M malleable metal element fiber gripping technology. There is no fiber splice or second joint inside the connector, so there is no added attenuation at the connection.

When the conformable metal element closes, it grips a length of the fiber, eliminating fiber movement associated with other crimp-style connectors. The strength of the metallic element ensures that Crimplok connectors meet industry standards for temperature and humidity.

The plastic buffer retention insert



3M Crimplok ST\* Connector Multimode



3M Crimplok SC Connector Single-mode

also prevents fiber movement by gripping the buffer without crushing it when the crimp ring is crimped. On jacketed cable, the crimp ring also grips the Kevlar® strands and cable jacket to prevent the fiber connection from breaking when the cable is pulled.

The buffer retention insert and the crimp ring combine to ensure that Crimplok connectors perform extremely well and meet rigorous tensile strength requirements in building wiring applications.

#### Installs cleanly and simply

Preparing and installing Crimplok connectors is as simple as the concept behind them.

During installation the fiber passes through the back end of the connector, through the metallic element and extends beyond the end of the activation tool. Pressing the activation tool locking arm closes the metal element around the fiber. It's that simple.

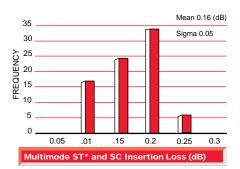
The few tools required for installing a Crimplok connector can be conveniently stored in a small tool pouch.

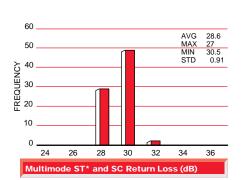
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# $www.C3 comunicaciones.es \\ Crimplok^{\tiny{\mathrm{IM}}} Connectors$

Features Benefits		
Easy to install	Saves time	
Meets EIA/TIA-568A specifications	Rugged, reliable performance	
Non-adhesive design	Clean and simple terminations	
Intermateability with standard connectors	Convenience; quick restoration of existing systems	
No setup required	Saves time and money	
Minimal tools required	Low-cost kit	
No electricity required	Installation anywhere	
Pre-radiused PC zirconia ceramic ferrule	Assured contact of fibers; stability through temperature change; quality performance	

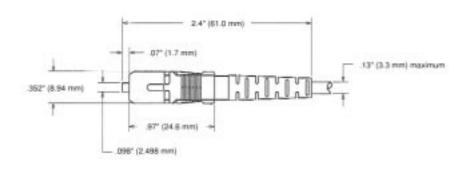
### Crimplok 6900 SC Connector Multimode





Specifications <sup>1</sup>	
Attenuation @ 1300 nm (dB)	<0.2 typical (62.5/125 µm fiber)
Reflection (dB)	≤-29 typical
Operational temperature (cable dependent)	-10° to 60°C (14° to 140°F)
Storage temperature (unassembled connector)	-40° to 80°C (-40° to 176°F)
Environmental	
Humidity	Max loss increase < 0.20 dB; Reflection < -25 dB
Cold	Max loss increase < 0.20 dB; Reflection < -25 dB
Temperature life	Max loss increase < 0.20 dB; Reflection < -25 dB
Mechanical	
Impact	Mean loss 0.18 dB; Mean reflection -28 dB
Cyclic flex	Mean loss 0.16 dB; Mean reflection -28 dB
Twist	Mean loss 0.16 dB; Mean reflection -28 dB
Cable retention	Mean loss 0.16 dB; Mean reflection -28 dB
Mating durability 500 matings	<0.22 change
Materials	
Connector ferrule Connector body and housing Boot	Zirconia ceramic Thermoplastic polymer Elastomeric resin
Identification	Black body, beige shell, black boot
Fiber size	125 µm multimode
Couplings Housing Sleeve	Engineering thermoplastic Ceramic

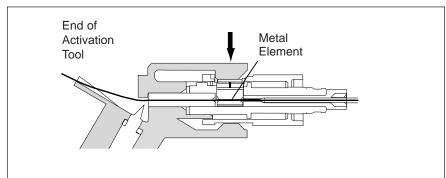
 $^{1}\text{Note:}$  Testing performed on cable assemblies with 3 mm jacketed cable and 900  $\mu m$  buffered fiber.



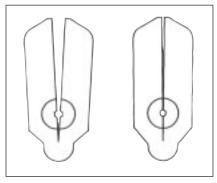
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Considerational		
Specifications <sup>1</sup>		
Attenuation @ 1300 nm (dB)	<0.2 typical	
Reflection (dB)	≤-29 typical	
Operational temperature	-10° to 60°C (14° to 140°F) (cable dependent)	
Storage temperature	-40° to 80°C (-40° to 176°F) (unassembled connector)	
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Mechanical		
Impact	Mean loss 0.12 dB; Mean reflection -28 dB	
Cyclic flex	Mean loss 0.11 dB; Mean reflection -28 dB	
Twist	Mean loss 0.11 dB; Mean reflection -28 dB	
Cable retention	Mean loss 0.12 dB; Mean reflection -27 dB	
Mating durability 500 matings	<0.3 change	
Materials		
Connector ferrule Connector body and housing Boot	Zirconia ceramic Thermoplastic polymer Elastomeric resin	
Identification	Black body, beige shell, beige boot	
Fiber size	125 µm multimode	
Couplings Housing Sleeve	Nickel plated zinc Phosphor bronze	

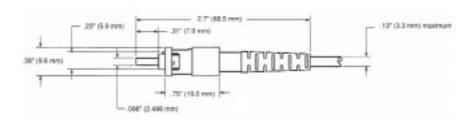
¹Note: Testing performed on cable assemblies with 3 mm jacketed cable and 900 µm buffered fiber.



The metal element closes around the fiber.



Malleable metal element assures a reliable connection.



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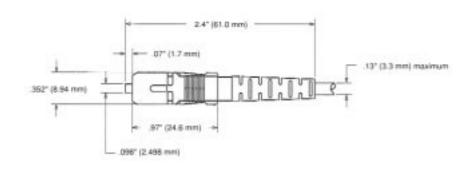
## Crimplok™ Connectors

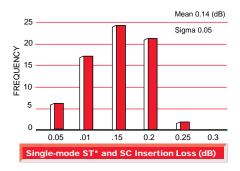
Features	Benefits	
Installation in less than two minutes	Saves time	
Meets EIA/TIA 568A specifications	Rugged, reliable performance	
Non-adhesive design	Clean and simple terminations	
Intermateability with standard connectors	Convenience; quick restoration of existing systems	
No setup required	Saves time and money	
Minimal tools required	Low-cost kit	
No electricity required	Installation anywhere	
Pre-radiused PC zirconia ceramic ferrule	Assured contact of fibers; stability through temperature change; quality performance	

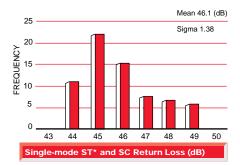
## $Crimplok^{\scriptscriptstyle{TM}}\,8900\;SC\;Connector\;Single-mode$

Specifications <sup>1</sup>	
Attenuation @ 1300 nm (dB)	<0.2 typical
Reflection (dB)	≤-40 dB typical
Operational temperature (cable dependent)	-10 to 60°C (14° to 140°F)
Storage temperature (unassembled connector)	-40° to 80°C (-40° to 176°F)
Environmental	
Humidity	Max loss increase < 0.20 dB; Reflection ≤ -40 dB
Cold	Max loss increase < 0.20 dB; Reflection ≤ -40 dB
Temperature life	Max loss increase < 0.20 dB; Reflection ≤ -40 dB
Mechanical	
Impact	Mean loss 0.18 dB; Mean reflection ≤ -40 dB
Cyclic flex	Mean loss 0.16 dB; Mean reflection ≤ -40 dB
Twist	Mean loss 0.16 dB; Mean reflection ≤ -40 dB
Cable retention	Mean loss 0.16 dB; Mean reflection ≤ -40 dB
Mating durability 500 matings	<0.22 change
Materials	
Connector ferrule Connector body and housing Boot	Zirconia ceramic Thermoplastic polymer Elastomeric resin
Identification	Black body, blue shell, black boot
Fiber size	125 µm single-mode
Couplings Housing Sleeve	Engineering thermoplastic Zironia ceramic
Note: Testing performed on cable assembli	on with 2 mm inakated apple and 000 um buffered fiber

¹Note: Testing performed on cable assemblies with 3 mm jacketed cable and 900 µm buffered fiber.



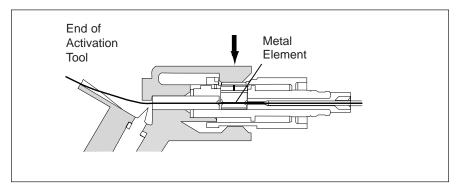




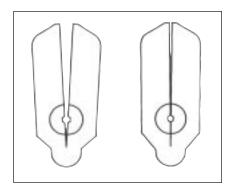
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Specifications <sup>1</sup>		
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Mating durability 500 matings	<0.3 change	
Materials		
Connector ferrule Connector body and housing Boot	Zirconia ceramic Thermoplastic polymer Elastomeric resin	
Identification	Black body, beige bayonnet cap, blue boot	
Fiber size	125 µm single-mode	
Couplings Housing Sleeve	Nickel plated zinc Zirconia ceramic	

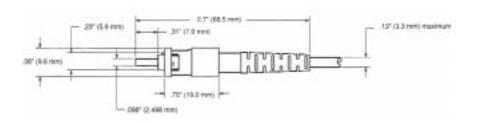
 $<sup>^1\!\</sup>text{Note} :$  Testing performed on cable assemblies with 3 mm jacketed cable and 900  $\mu\text{m}$  buffered fiber.



The metal element closes around the fiber.



Malleable metal element assures a reliable connection.



#### 3M<sup>™</sup> Crimplok<sup>™</sup> Connectors

#### **Ordering Information**

To order, specify the correct product number from the chart below. For more information, please contact your authorized 3M distributor or a 3M Telecom Systems Division sales representative at 800/426 8688.

Product #	Description	Packaging Order	Minimum
6900	Crimplok Connector, SC MM, 125 μm	1/bag, 60 bags/case	60 each
6901	Crimplok Connector, ST* MM, 125 μm	1/bag, 60 bags/case	60 each
6112	ST* Multimode Simplex Coupling	1/bag, 60 bags/case	60 each
6113	ST* Multimode Duplex Coupling	1/bag, 60 bags/case	60 each
6310	SC Simplex Coupling	1/bag, 60 bags/case	60 each
6313	SC Duplex Coupling	1/bag, 60 bags/case	60 each
6955	Crimplok Termination Kit	1/case	1 each
6955-T	Activation Tool, ST*/SC	1/case	1 each
8113	ST* Single-mode Duplex Coupling	1/bag, 60 bags/case	60 each
8119	ST* Single-mode Simplex Coupling	1/bag, 60 bags/case	60 each
8310	SC Single-mode Simplex Coupling	1/bag, 60 bags/case	60 each
8313	SC Single-mode Duplex Coupling	1/bag, 60 bags/case	60 each
8955	Crimplok SM Conversion Kit	1/case	1 each



6955-T Activation Tool



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6955 Crimplok Termination Kit

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Tools for the Crimplok Connector are stored

in a small tool pouch.

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#### **Important Notice**

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**Telecom Systems Division** 

6801 River Place Blvd. Austin, TX 78726-9000 800/426 8688 FAX 800/626 0329 http://www.3M.com/telecom

