

# 3M™ No Polish SC/UPC Connector

## Singlemode and Multimode 250 µm/900 µm

3M™ No Polish Connector (NPC) enables fast, on-site installation of 250 µm and 900 µm connections utilizing a one piece, pre-assembled design.

The SC compatible connector consists of a factory-polished ceramic fiber/ferrule assembly and a mechanical splice that is installed with a simple and reliable field tool. A bell-shaped boot is attached to the connector body, minimizing the chance of losing or forgetting to install the boot during the connection.

To maximize field 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. The No Polish Connector is tested for Premises and FTTP applications for indoor and outdoor locations and is available in SM, 62.5 µm, 50 µm and also 50 µm LOMMF (laser optimized multimode fiber) for 10 Gb applications.

The No Polish Connector meets EIA/TIA 568-B.3, IEC requirements and is RoHS Compliant.\*



3M™ No Polish SC/UPC Connectors



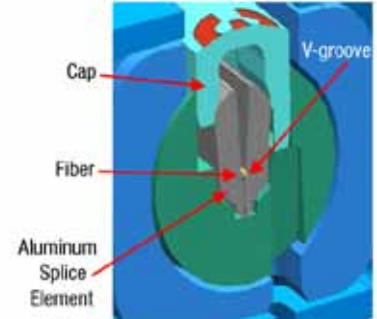
3M™ No Polish SC Connector Assembly Tool 8865-AT



The 3M™ No Polish Connector Kit with Cleaver 8865-C includes all the tools necessary for installation.



The 3M™ No Polish Connector Premium Kit 8865-C/PR has all of the tools of the 8865-C in a larger case that can hang by a hook and includes a work surface, fiber shard container, tweezers, brush and lint-free wipes in a tub.



Cross-sectional view of actual splice. After the fiber is inserted, the cap is depressed to force clamping and locating surfaces against the fiber, locking and aligning the fiber in place.

Features	Benefits
Field installation	Right cable length with no cable slack to store
One piece, pre-assembled design	No small, loose parts
Simple assembly tool	Fast, easy installation
Fiber holder for assembly	Aligns and guides fiber into connector with optimal insertion force
900 µm buffer strain relief	Excellent pull out strength
Factory-polished fiber stub	No on-site polish or adhesives required
Bell-shaped boot	Helps prevent fiber from bending below minimum bend radius
Reusable	Maximize installation yield



## 3M™ No Polish SC Connector Specifications

	6800-50	Multimode 6800-50/LOMMF	6800-62.5	Singlemode 8800
<b>Insertion loss typical @ 1300nm</b>	0.2	0.2	0.2	0.3
<b>Reflection typical (dB)</b>	<-30	<-30	<-25	<-40
<b>Connector durability</b>	<0.1 change after 500 matings	<0.1 change after 500 matings	<0.1 change after 500 matings	<0.2 change after 100 matings
<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)	-40°C to 75°C (-40°F to 167°F)
<b>Cable tension (in service)</b>				
Straight pull	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.5 dB increase at 6.9N (1.54 lb.) for 900 µm*
Side pull	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.1 dB increase at 2.2N (0.5 lb.) for 900 µm	< 0.1 dB increase; 2.2N (0.5 lb.) for 900 µm*
<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
Boot	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>Connector identification</b>				
Backbone	Black	Black	Black	Black
Housing	Black	Aqua	Beige	Blue
Boot	White	White	White	White
<b>Field termination kit (no power needed)</b>	8865-C	8865-C	8865-C	8865-C

The SC MM NPC meets EIA/TIA 568-8.3 and IEC requirements

\*Connectors tested under load.

## Ordering Information

Product Number	Connector, Kit and Tool Descriptions	Packaging	3M ID
8800	No Polish SC Connector SM 250/900 with tool (blue housing)	60/package	80-6113-2622-6
6800-50	No Polish SC Connector MM 50 µm 250/900 with tool (black housing)	60/package	80-6113-2623-4
6800-50/LOMMF	No Polish SC Connector MM 50 µm LOMMF 250/900 with tool (aqua housing)	60/package	80-6113-2624-2
6800-62.5	No Polish SC Connector MM 62.5 µm 250/900 with tool (beige housing)	60/package	80-6113-2625-9
8865-AT	No Polish SC Connector Assembly Tool 250/900 µm	1/package	80-6113-2630-9
8865-C	No Polish Connector Kit with Cleaver	1/package	80-6113-2379-3
8865-C/PR	No Polish Connector Premium Kit with Cleaver	1/package	80-6113-8783-0
8865-CL	No Polish Connector Cap Lifter Tool	25/package	80-6113-8065-2

"RoHS Compliant 2002/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

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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

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