

# 3M™ No Polish SC/APC Connector

## 1.6 to 3.0 mm Jacket

3M™ No Polish SC/APC Connector enables fast, on-site installation of 1.6 mm to 3.0 mm kink resistant cable\* and FRP cable with G.657 bend insensitive fiber in 1.6 mm x 2.0 mm and 2.0 mm x 3.0 mm configurations.

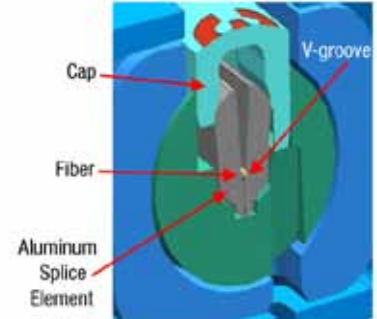
The SC/APC compatible connector consists of a factory-polished fiber/ferrule assembly and a mechanical splice that can be installed without an assembly tool. A twist on, hard shell boot clamps onto the cable jacket and aramid fiber to provide excellent strain relief.

For excellent reflection performance of <-60 dB across temperature extremes, the connector can be assembled using a simple cable holder and the 3M™ Fiber Optic Angle Cleaver 2535 to create a keyed, angle cleave splice.

To maximize field installation yield, the splice in the connector can be opened and reused with a cap lifter. The assembly tool for the angle splice connector 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.

\* Using G.657 bend insensitive fiber and a thick wall jacket that is filled with aramid fiber, kink resistant cable can be bent at a 90 degree angle across a sharp corner without excessive insertion loss.

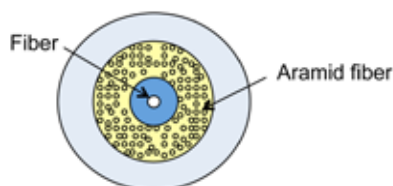


Cross-sectional view of actual splice. After the fiber is inserted, the cap is depressed to force clamping and locating surfaces against the fiber, locking and aligning the fiber in place.

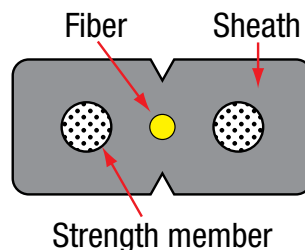


3M™ No Polish SC/APC Connector Flat and Angle Splice 1.6-3 mm Jacket

Features	Benefits
Field installation	The right cable length with no cable slack to store
Multiple cable configurations	One connector for 1.6 to 3.0 mm cable and FRP cable
Simple assembly tool	Fast, easy installation
Keyed, angle cleave splice	Low reflection, <-60 dB across temperature extremes
Cable jacket & aramid fiber clamps	Excellent pull out strength
Re-usable	Maximize installation yield



Cross-sectional view of kink resistant cable (1.6, 2.0, 3.0 mm diameter)

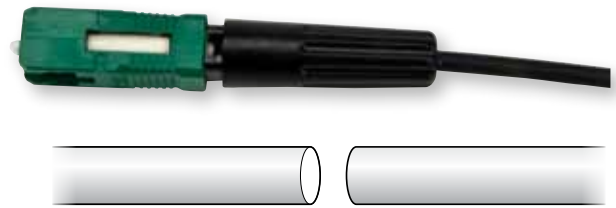


Cross-sectional view of FRP Cable (1.6 mm x 2.0 mm, 2.0 mm x 3.0 mm)

## Flat Splice Connectors

3M™ No Polish SC/APC Connector Flat Splice connectors provide excellent performance for digital transmission networks that require a SC/APC termination, such as an Optical Network Terminal that is pre-installed with an SC/APC interface.

SC/APC flat splice connectors provide acceptable analog video performance for indoor applications since the flat splice has a typical reflection of -55 dB for room temperatures.

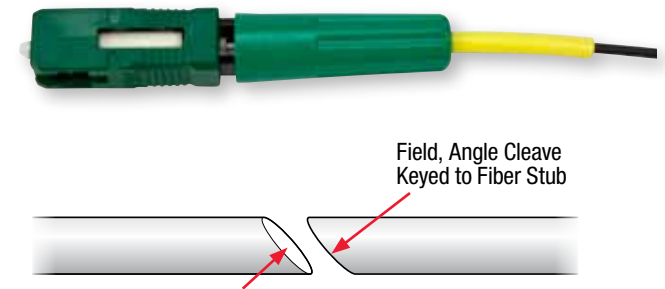


Flat Cleave Splice  
Uses standard fiber cleaver for field termination

## Angle Splice Connectors

3M™ No Polish SC/APC Connector Keyed, Angle Splice connectors are specifically designed for analog video transmission with very low optical reflection of <-60 dB across temperature extremes.

Based upon 3M laboratory testing, keying of the angle cleaves is important for optical reflection performance.



Factory Formed Angle  
Inside Connector

Keyed, Angle Cleave Splice  
Using the 3M™ Fiber Optic Angle Cleaver 2535, a precise angle can be formed on the field fiber end. With the assembly tool, angles of the field fiber and connector fiber are aligned to optimize optical coupling and minimize back reflections.

## Assembly Tool for Jacketed Cable



3M™ No Polish Connector Assembly Tool 8865-JT is included in every box of 60 angle splice connectors. Keeps angle cleaves aligned during installation process.

Specifications	
Cable diameter	1.6, 2.0, 2.9, 3.0 mm cable & 1.6x2 mm, 2x3 mm FRP cable
Coating diameter	250 µm/900 µm PVC buffer
Fiber type	G.657 ITU compliant fiber with minimum bend radius of 15 mm or less
Wavelengths	1310 nm, 1490 nm, 1550 nm, 1625 nm
Insertion loss (mated to standard SC connector)	<0.3 dB typical
Reflection (Flat splice)	-55 dB typical at room temperature < -35 dB for -40°C to 75°C (-40°F to 167°F)
(Angle splice)	-65 dB typical at room temperature < -60 dB for -40°C to 75°C (-40°F to 167°F)
Connection durability, after 100 matings	< 0.2 dB change
Operating temperature	-40°C to 75°C (-40°F to 167°F)
Cable tension (in service)	< 0.2 dB increase at 2.5kg (5.5lbf)
Cable Flex, 0.9kgf (2lbf), ±90°, 100 time	< 0.2 dB change
Impact, (4m 13ft.) 8 times	< 0.2 dB change
Dimensions	9.3 x 9.3 x 57.4 mm (0.37" x 0.37" x 2.26")**
Installation temperature	> 15°C (59°F) for cable with tight 900 µm buffer > -5°C (23°F) for cable with semi-tight 900 µm buffer or FRP cable

\*\*For 1.6 and 2.0 mm cables, a flexible tube is slipped over the cable to increase the diameter to 3.0 mm. This tube extends 19 mm (0.75") beyond the boot.

## Simple Installation Process

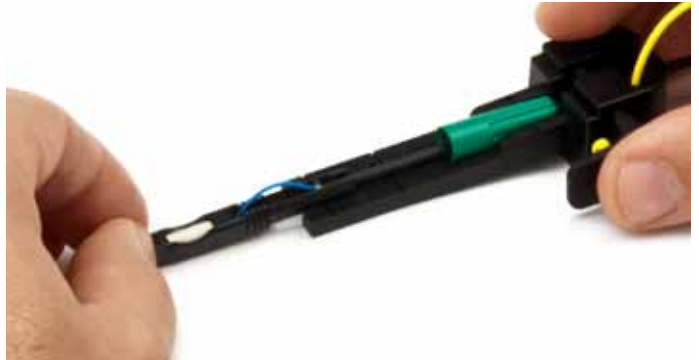
The 3M™ No Polish Connector is easy to install, even for the SC/APC connector with angle splice.

### Step 1: Angle Cleave Fiber



After stripping the coating and cleaning the glass, secure the fiber with the two clamps and activate the cleaver in one step by pressing the lever. The fiber holder maintains the angle orientation from the cleaver to the connector in the assembly tool.

### Step 2: Assemble Connector



Use the holder to automatically align and to guide the fiber into the connector. Once there is a fiber bow to indicate the fiber is fully inserted, activate the connector by depressing the button.

### 3M™ Fiber Optic Angle Cleave Kit 2565



The 3M™ Fiber Optic Angle Cleave Kit 2565 includes the 3M™ Fiber Optic Angle Cleaver 2535 and all the tools necessary for 8802-T/APC/AS/1.6-3, except for 8865-JT, which is included in every box of 60 connectors.

### 3M™ No Polish Connector Kit 8865-C



The 3M™ No Polish Connector Kit 8865-C includes all the tools necessary for 8802-T/APC/FS/1.6-3 flat splice connectors

## 3M™ Connectors, Tools and Kits Ordering Information

Product Number	Product Description	Packaging	3M ID
8802-T/APC/AS/1.6-3	No Polish SC/APC Connector Angle Splice 1.6-3 mm Jacket	60/package	80-6113-3505-2
8802-T/APC/FS/1.6-3	No Polish SC/APC Connector Flat Splice 1.6-3 mm Jacket	60/package	80-6113-3509-4
2535	Fiber Optic Angle Cleaver	1/package	80-6113-2423-9
2565	Fiber Optic Angle Cleave Kit	1/package	80-6113-2508-7
8865-C	No Polish Connector Preparation 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-JT	No Polish SC Connector Jacket Assembly Tool	1/package	80-6113-3969-0
8865-CL	No Polish Connector Cap Lifter Tool	25/package	80-6113-8065-2

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



The 3M™ No Polish Connector Premium Kit with Cleaver 8865-C/PR has all the tools of the regular 8865-C kit but in a larger case that can be hung by a hook, along with a work surface, shard container, tweezers, brush and lint-free wipes in a tub.

3M is a trademark of 3M Company.

### Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

### Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 12 months from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether indirect, special, incidental or consequential regardless of the legal theory asserted.**



### 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)

Please recycle. Printed in USA.  
© 3M 2012. All rights reserved.  
80-6113-8300-3