

3M™ No Polish Connector LC/APC 250 μm/ 900 μm

Description

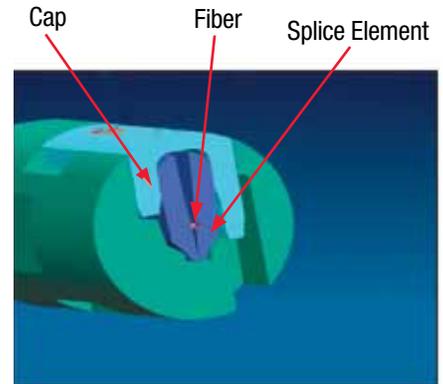
3M™ No Polish Connector (NPC) LC/APC provides fast, on-site installation of 250 μm and 900 μm singlemode fiber.

The LC/APC compatible connector consists of a factory-polished ferrule assembly and a mechanical splice that is installed with a simple, field tool. It is available with a standard, flat splice configuration or with a keyed, angle splice for excellent back reflection of <-60 dB.

NPC has a streamlined boot that is attached to the connector body, virtually minimizing the chance of losing or forgetting to install the boot during the connection. After installation, the boot keeps the fiber from kinking, even during side pull.

The No Polish Connector is tested for premises and FTTP applications for indoor and outdoor locations.

The NPC LC/APC is RoHS compliant.*



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



3M™ No Polish Connector LC/APC 250 μm/900 μm

Features	Benefits
Field installation	Always the right cable length with no cable slack to store
One piece, pre-assembled design	No small, loose parts
Simple assembly tool	Fast, easy installation
Keyed, angle cleave splice	Low reflection, < -60 dB across temperature extremes
900 μm buffer strain relief	Excellent pull out strength
Factory polished stub in ferrule	No on-site polish or adhesives required



Flat Splice Connectors

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

LC/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.

Angle Splice Connectors

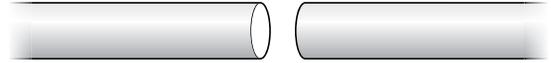
3M™ No Polish Connector LC/APC Keyed, Angle Splice Connectors are specifically designed for analog video transmission with very low optical reflection of < -60 dB across temperature extremes.

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

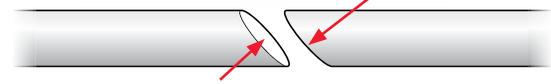
3M™ No Polish LC Connector Assembly Tool 8835-AT for 250/900 μm Singlemode fiber



3M™ No Polish LC Connector Assembly Tool 8835-AT is included in every box of 60 connectors. Keeps angle cleaves aligned during installation process.



Flat Cleave Splice
Uses standard fiber cleaver for field termination



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.

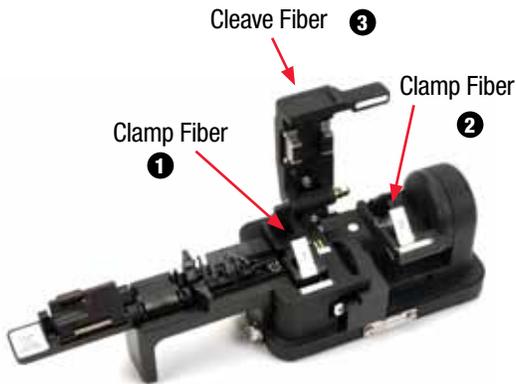
Specifications

Fiber diameter	125 μm
Insertion loss	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)	< 0.5 dB increase at 4.8N (1.10 lbf) for 250 μm < 0.5 dB increase at 6.9N (1.54 lbf) for 900 μm
Side pull (in service)	< 0.5 dB increase at 4.6N (1.00 lbf) for 900 μm
Water immersion, 43°C (109°F), 3 days	< 0.2 dB increase after 24 hour dry time
Dimensions	6.8 x 11.7 x 41.3 mm (0.27" x 0.46" x 1.62")

Simple Installation Process

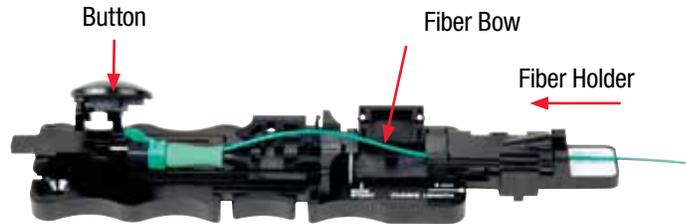
The 3M™ No Polish Connector is easy to install, even for the LC/APC connector with angle splice.

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 tools necessary for 8830-APC/AS.

3M™ Connectors, Tools and Kits Description

Model Number	Description	Packaging
8830-APC/AS	No Polish Connector LC/APC SM Angle Splice 250/900	60/package
8830-APC/FS	No Polish Connector LC/APC SM Flat Splice 250/900	60/package
2535	Fiber Optic Angle Cleaver	1/package
2565	Fiber Optic Angle Cleave Kit with Angle Cleaver	1/package
8865-C	No Polish Connector Preparation Kit with Flat Cleaver	1/package

3M™ No Polish Connector Kit 8865-C



3M™ No Polish Connector Kit 8865-C for 8830-APC/FS flat splice connectors.

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80-6113-2862-8