

WARNINGS:

- Read and understand all instructions. Follow all warnings and instructions marked on the product.
- Disconnected optical components may emit invisible optical radiation that can damage your eyes. **TO AVOID PERSONAL INJURY, never** look directly into an optical component that may have a laser coupled to it. If accidental exposure to laser radiation is suspected, consult a physician for an eye examination.
- The ferrule component of this product has exposed bare fiber. Use extreme caution when handling.

CAUTIONS:

- Isopropyl alcohol is flammable and can cause eye irritation on contact. If eye contact occurs, flush with water for at least 15 minutes. In case of ingestion, consult a physician. Use only in well-ventilated areas.
- Wearing safety glasses during installation of this device is recommended. Although standard safety glasses provide no protection from potential optical radiation, they offer protection from accidental airborne hardware and cleaning solvents.
- Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Do not bend the cable less than the recommended minimum bend radius. Do not use more pulling force on the cable than specified. Do not kink or crush cable.
- **SAVE THESE INSTRUCTIONS.**

PK-A3295-10-00-0C

INSTALLATION INSTRUCTIONS

ENGLISH

Tools Required:

- FASTSPLICE Universal LC/SC/ST ferrule holder - included in the Leviton Splice-On Connector Tool Kit (sold separately). Also sold individually (Cat. No. 49886-SH1).
- Fine-tipped felt pen
- Millimeter scale, or use the marking templates in Step 3
- Fiber stripper
- 99% Isopropyl alcohol
- Lint-free wipes
- Precision cleaver
- Fusion splicer, with appropriate accessories.

Leviton Recommended Tool Kit: Splice-On Connector (SOC) Tool Kit

(Cat. No. 49800-SOC) - Includes all the tools you will need for this installation:

- Leviton FASTSPLICE Universal LC/SC/ST ferrule holder (10 pk)
- 2 mm cable clamp
- 3 mm cable clamp
- 250/900 μm cable clamp
- Lint-free wipes (100 pk)
- Safety pad
- 250/900 μm fiber stripper
- Kevlar® aramid fiber shears
- Armored cable cutter
- Slitting tool
- Mini fiber optic disposal bin w/ slide
- Fiber tube scorer 1.6-6.0 mm
- Fiber preparation fluid PNM- PPF

Before Installation

Perform all setup, maintenance, and preparation steps, as required by the fusion splicer manufacturer's instructions, prior to termination. Fiber type (SM, MM) and splice sleeve heater settings must be correctly entered for proper termination.

Fiber Holders or Sheath Clamps and Cable Clamps: Properly secure the raw fiber cable on the left side of the fusion splicer. Verify that the correct fiber holder is being used for cable construction, by splicer manufacturer and model. Cable clamps are also required when using fan out kits and any loose tube construction during termination, to prevent fiber pistoning. UCL Swift Splicers require holder UCL SWIFT PN: F-20/30.

Fusion Splice Settings: "Auto" (by fiber type) is a common acceptable setting for most splicers. To account for pre-positioning and travel of motors, some devices have pre-configured Splice-On Connector (SOC) settings. Consult the user guide and setup menu of the device in use for available settings.

NOTE: For typical fusion splice programs that are applicable by the manufacturer, see the Fusion Splice Programs table.

Heater Settings: To account for the use of smaller form factor heat shrink sleeves, many current devices have pre-configured heater settings. For older units that do not specifically address splice-on connectors, a standard shrink tube of similar length can typically be used. If sleeves are over or under-heated, a custom heater program may be required. Leviton recommends testing the heater performance by using a target splice sleeve with bulk tight-buffered fiber, and adjusting the heat duration and/or temperature accordingly prior to termination.

CAUTION: Settings may vary by specific splicer manufacturer and model. Refer to heater settings menu by splicer. While heat cycle duration may be extended, it is NOT recommended to increase heating temperatures ABOVE the settings listed in the second table on the right.

Fusion Splice Programs		
MFG	Model	Common Settings
AFL	90s	"SM AUTO" for Single mode "MM AUTO" for Multi-mode
	70s	
	41s/31s	
Sumitomo	T-Q102-CA	Select "Auto" and then "Auto" - or - Single mode "SM G652 Auto"; Multi-mode "MM G651 Auto"
	T-Q502-S	
Fitel	S179	(example S179) Setting 064 "AFL SOC SM" for Single mode; Setting 065 "AFL SOC MM" for Multi-mode
	Ninja NJ001	
UCL Swift	KF4 / KF4A	(example KF4A) Setting 6 "SM Quick" for Single mode; Setting 8 "MM Quick" for Multi-mode
	K11	

Recommended Heater Settings				
900 μm Connectors				
Utilizes 27 mm splice sleeves				
MFG	Model	Mode Title	Temperature	Time
AFL	90s	Custom	410°F (210°C)	30 seconds
	70s	Custom	464°F (240°C)	30 seconds
	41s/31s	Custom	446°F (230°C)	45 seconds
Sumitomo	T-Q102-CA	Lynx	374°F (190°C)	35 seconds
	T-Q502-S	Lynx	374°F (190°C)	34 seconds
Fitel	S179	SOC EZFuse	338°F (170°C)	50 seconds
	Ninja NJ001	Custom	338°F (170°C)	80 seconds
UCL Swift	KF4 / KF4A	Custom	383°F (195°C)	45 seconds
	K11	Custom	383°F (195°C)	45 seconds

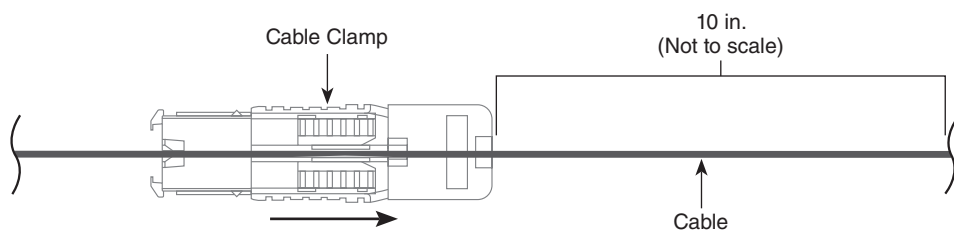
RECOMMENDED: Scan the QR code located on the outer packaging for an expansive list of fusion splicer makes and models, fiber holder part numbers, fusion splice settings, and heater settings. Please refer to the splicer manufacturer User Manual or Leviton Applications Note NSAN-19-0003-090919 for instructions on creating custom heater programs.

Installation

1. If using a fan out kit, place a 900 μm clamp on the cable.

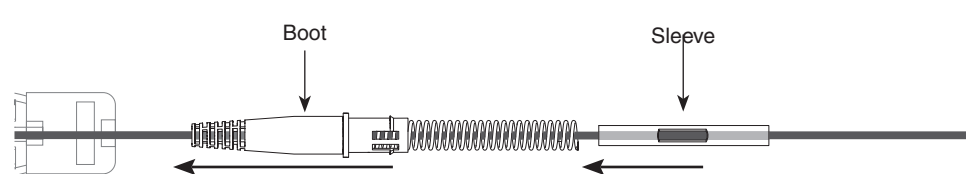
- Install the appropriate cable clamp approximately 10 in. from the end of the cable.
- Engage the clamp.

NOTE: This step is not applicable to 900 μm tight buffer fibers. Use the cable clamp only when terminating 250 μm coated fibers with a 900 μm buffer tube (e.g., when using a fan-out kit).



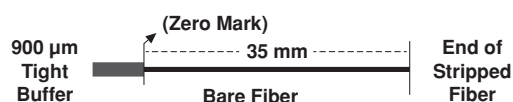
2. Add a boot and sleeve to the cable.

- Slide the 900 μm boot, followed by the protective sleeve, onto the cable.



3. Prepare the fiber for cleaving.

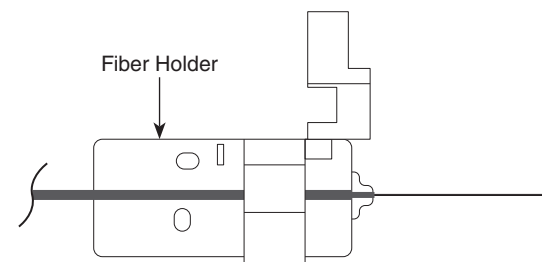
- On a flat, clean surface, use a fine-tipped felt pen to place a mark 35 mm from the end of the cable jacket. Use a millimeter scale or the template below.
- Remove the 900 μm buffer to the 35 mm mark.
- Clean the stripped fiber with an alcohol wipe, to remove any debris.



4. Perform a precision cleave.

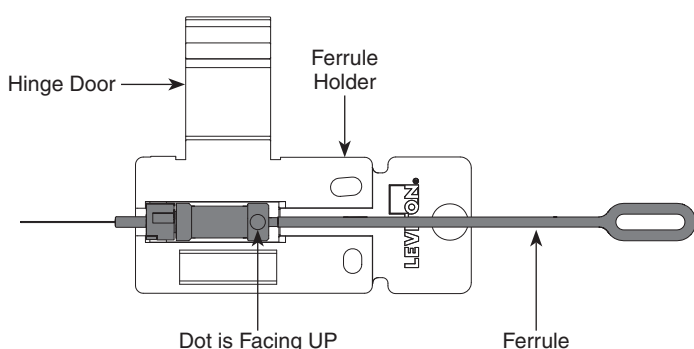
NOTE: A maximum cleave length of 10 mm is required to position the exposed fiber under the splice sleeve after heat shrinking. Prior to cleaving, verify that a 10 mm cleave will be performed for fiber holders and precision cleavers by manufacturer.

- Place the stripped fiber into the fiber holder so that the end of the 900 μm buffer is at the exit point of the fiber holder, or at the appropriate position to provide a maximum 10 mm cleave length. Then, close the fiber holder clamp.
- Load the fiber holder into a precision cleaver.
- Perform the precision cleave and then properly dispose of any fiber shards.
- Carefully remove the fiber holder from the precision cleaver and then load it into the left side of the fusion splicer.



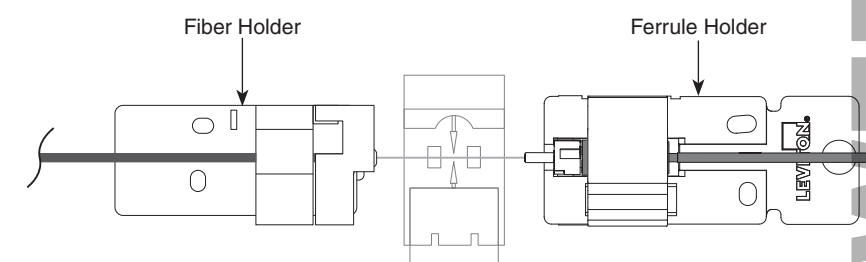
5. Prepare the ferrule unit for fusion splicing.

- Load the ferrule into the FASTSPLICE Universal ferrule holder and then close the hinge door.
- Load the ferrule unit into the right side of the fusion splicer.



6. Perform a fusion splice.

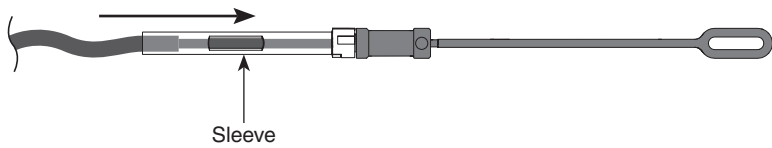
- Verify that the fibers are properly seated in the V-grooves and then close the wind protector.
- Perform the fusion splice, in accordance with the fusion splicer manufacturer's instructions.
- Verify an acceptable insertion loss value and, if not an automated step in the splicer, perform a tension test.



WEB VERSION

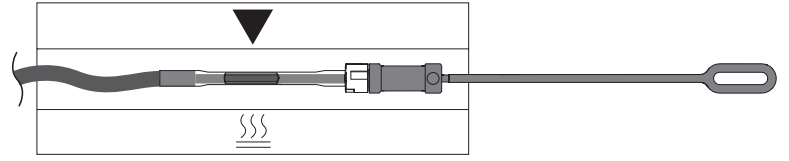
7. Slide the sleeve over the splice point.

- a. Slide the splice sleeve towards the left fiber holder and open the wind protector.
- b. While maintaining gentle tension, open the connector holder and fiber holder doors and remove the spliced assembly from the splicer.
- c. While maintaining gentle tension, slide the splice sleeve over the splice point until it is flush with the ferrule unit.



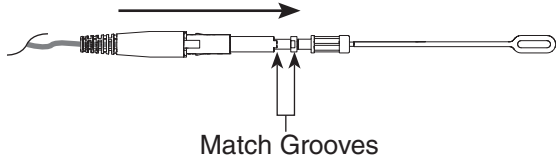
8. Heat the protective sleeve.

- a. Lift the fiber and connector grip and then position the splice assembly into the center of the heating unit.
 - b. Heat the protective sleeve in accordance to the manufacturer's instructions.
- WARNING:** Allow time for the sleeve to cool before removing from the heater.

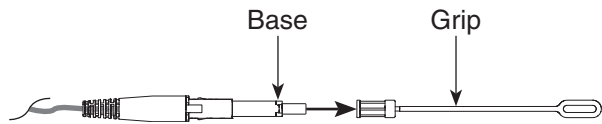


For LC Termination:

- a. Slide the boot over the protective sleeve.

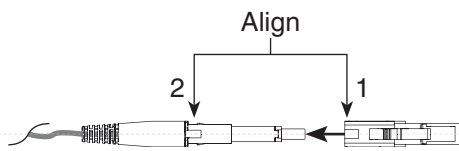


- b. Hold the base and remove the grip.

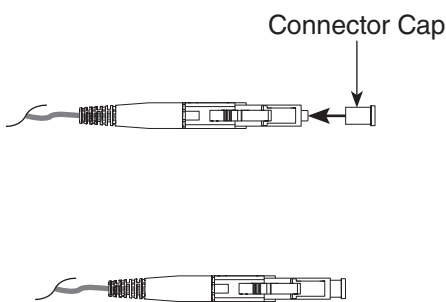


- c. Add connector housing. Align tab on boot with key/opening on connector body. Press boot assembly onto housing until a click is heard.

NOTE: For APC (green) connectors, align the red dot on the ferrule assembly, with the white dot on the boot assembly key and the key/opening in the connector housing.



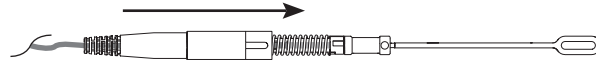
- d. If not installed, add a connector cap.



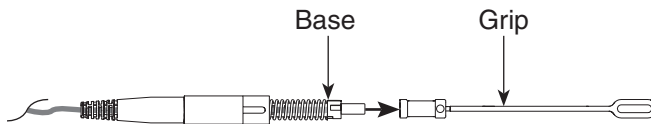
Termination is complete.

For SC Termination:

- a. Slide boot/spring over the protective sleeve.

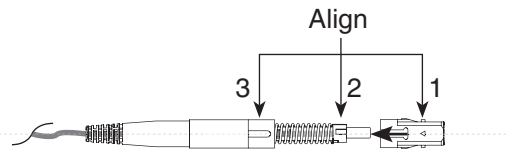


- b. Hold the base and remove the grip.

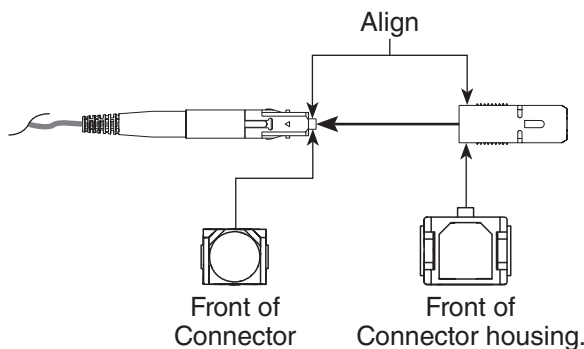


- c. Add connector body. Align 1 (triangle) to 2 (tab), then connect 1 and 2 to 3. Press boot assembly onto housing until a click is heard.

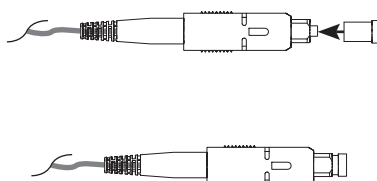
NOTE: For APC (green) connectors, align the red dot on the ferrule assembly, with the white dot on the boot assembly key and the key/opening in the connector housing.



- d. Add connector housing. Push until you hear a click.



- e. Add connector cap.



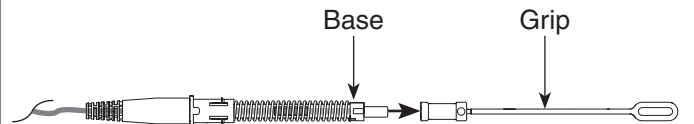
Termination is complete.

For ST Termination:

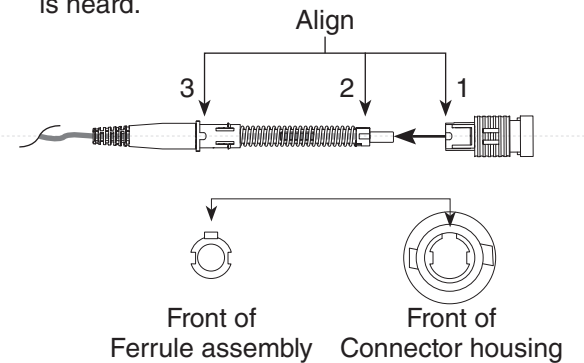
- a. Slide the boot/spring over the protective sleeve.



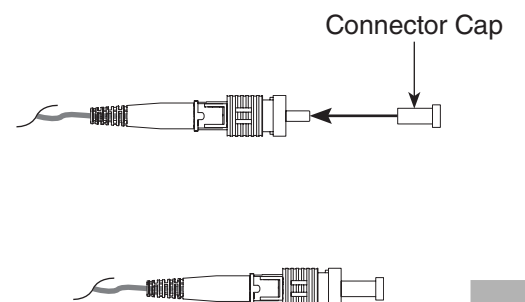
- b. Hold the base and remove the grip.



- c. Add connector housing. Align 1 into 2, verify ferrule assembly is inserted fully through connector housing. Connect 1 and 2 to 3 by pressing boot assembly onto housing until a click is heard.



- d. Add a connector cap.



Termination is complete.

Patents covering this product, if any, can be found on www.leviton.com/patents.

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INDUSTRY CANADA COMPLIANCE STATEMENT:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. **IMPORTANT!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This Class A digital apparatus complies with Canadian CAN ICES-3(A)/NMB-3(A).

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FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1-800-405-5320**.

LIMITED 1 YEAR PRODUCT WARRANTY

For Leviton's limited 1 year product warranty, go to www.leviton.com. For a printed copy of the warranty you may call 1-800-323-8920 or write to Leviton Manufacturing Co., Inc., Attn: Customer Service Dept., 201 North Service Road, Melville, New York 11747.

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For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com

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