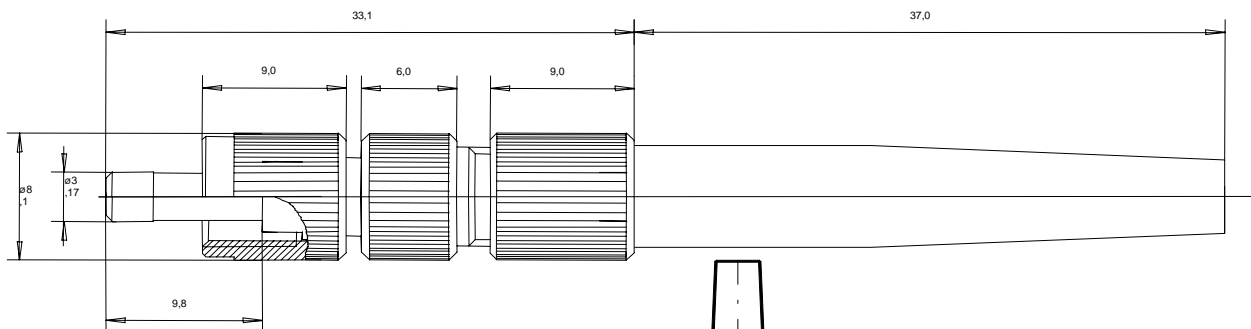


SL RP2.5-C FSMA Metal Fiber Optic Connector Installation Instructions

Introduction

The SL RP2.5-C FSMA Metal Fiber Optic Connector (Removable) is for 200/230µm fibers with 2.5 mm diameter cable jackets. It is made of metal with a plastic boot (bend protection sleeve). The connector is clamped on by screwing the body into the clamping nut. The fiber is then cleaved and thus requires no polishing, epoxy or gluing.

The time needed per connector is thus cut from 20 minutes to a mere two minutes. If necessary (in the case of system extensions or repair), the connectors can be removed and reconnected.

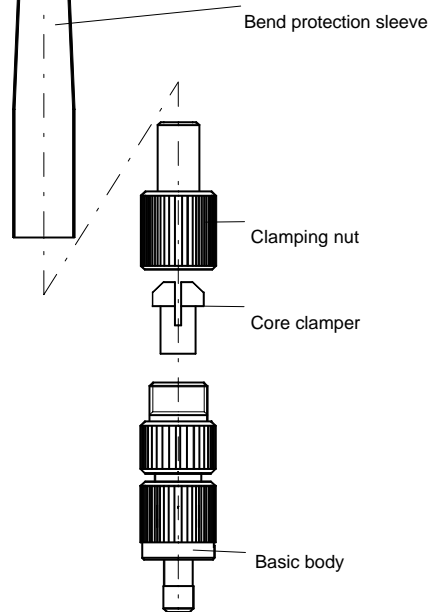


Connector Kit Components:

- Body
- Core Clamp
- Clamping Nut
- Bend Protection Sleeve
- Front Protective Cap (not shown)

Required Tools:

- Knife
- Ceramic Scissors (or Equivalent) for fiber and Kevlar®
- 0.65mm (22 AWG) Wire/Cable Strippers
- 230µm Fiber Strippers
- Cleaving Tool or Ceramic Cutting Plate



Instructions

NOTE: AVOID TOUCHING BARE FIBER (CLEAR) WITH FINGERS.

1) With 0.65mm (22 AWG) wire/cable strippers remove at least 70mm (2.75") of the outer cable jacket (blue or black) careful not to cut or damage (kink) the fiber (transparent) while cutting outer jacket.

2) **If present** cut the Kevlar® strain relief fibers (yellow) to a length of 3-5mm (0.1-0.2") with ceramic scissors (or equivalent).

3) Remove 63-65mm (2.5-2.6") of the fiber buffer (translucent) with the 230µm fiber strippers careful not to scratch the fiber. Remove remaining buffer material with a fresh paper cloth. Test fiber integrity by bending it down to a radius of 5-10 mm touching only the very tip. If the fiber does not withstand the test repeat procedure from the beginning.

4) Dismantle connector by unscrewing the body from the clamping nut. Remove protective cap. **Be careful not to lose the core clamber when you pull the two apart.**

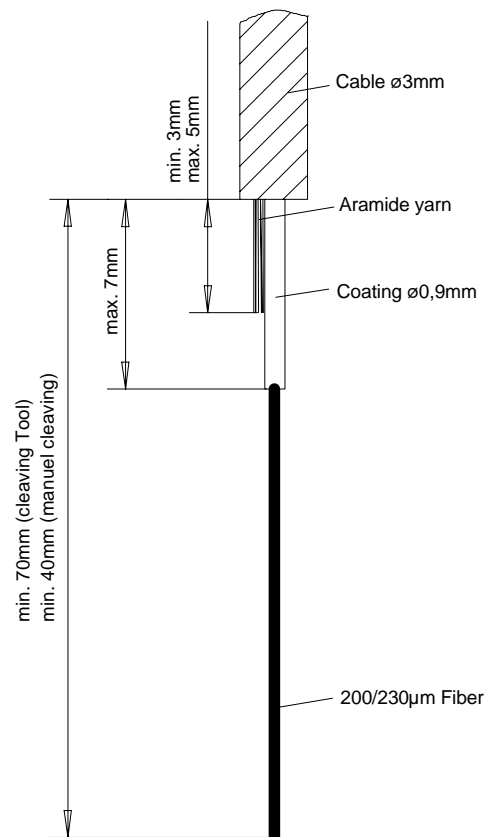
5) Take the core clamber out of clamping nut. Carefully slide the clamping nut with attached bend protection sleeve onto the bare fiber until the top of the clamping nut is even with the outer cable jacket (blue or black).

6) Slide the core clamber onto the bare fiber with the clamping slits facing towards the outer cable jacket (blue or black). Slide the core clamber until it is seated on the outer cable jacket. Be sure to thread the Kevlar® strain relief fibers into the core clamber as you push it on. This can be done by slowly twisting the core clamber as you slide it onto the outer cable jacket. Thread at least 60% of the Kevlar® strain relief fibers into the core clamber.

7) Carefully slide the bare fiber into the connector body. Be careful to line up the bare fiber with the guidance hole/path inside the connector body. If the bare fiber is properly seated up with the guidance hole in the connector body, no force should be required to push the bare fiber into the body. Forcing fiber into connector body will cause the bare fiber to break.

8) Slide the clamping nut with bend protection sleeve over the core clamber. Be careful not to unseat the core clamber from the outer cable jacket (blue or black). Hold with one hand. With other hand slide bare fiber through connector body until clamping nut and connector body meet.

9) Tightly screw together the clamping nut and basic body with fingers. **DO NOT USE PLIERS.** Be sure to avoid getting the Kevlar® strain relief fibers caught in the threads. **HOLD CONNECOTER BODY FIRMLY WHILE TWISTING THE CLAMPING NUT TO AVOID DAMAGING THE FIBER.** When complete, the bare fiber should protrude from the connector ferrule (surface) for several centimeters (as required by the cleaving tool used).



10) Use cleave tool to cleave off bare fiber sticking outside of connector. Follow cleave tool instructions for proper cleave procedures. If a ceramic cutting plate is used, **lightly** nick one side of bare fiber sticking out of connector where the bare fiber meets the surface of the connector. **DO NOT CUT THE BARE CABLE WITH THE CERAMIC PLATE.** **Light pressure** is all that is needed to properly nick the fiber. After nicking fiber, flick top of bare fiber with finger to break off fiber at the point where it was nicked.

11) Look at bare fiber. No bare fiber should visibly protrude from the connector surface. Surface of connector and fiber should appear to be a level plane. Using ceramic plates always leaves a small piece of fiber protruding from the connector. Therefore the **FRONT CONNECTOR SURFACE MUST NOT BE TOUCHED ANY MORE AFTER CLEAVING THE FIBER.** Also cable in-line extensions via connectors and adapters are not possible in that case. **ALWAYS EITHER CONNECT CABLE IMMEDIATELY OR APPLY PROTECTIVE CAP.** For closure inspection use of a 100x microscope with FSMA adapter is recommended.

12) Repeat for other side of passive cable. Screw connectors onto light power source and light power meter. Transmitted power should be greater than -35 dBm. If not, one or both connectors were put on incorrectly. In this case, remove connector by unscrewing the clamping nut from the connector body and repeat steps 1-11.

13) If light power source and meter are not available use other light source (sunlight, overhead lights, etc.) Place the light source on one connector or hold up one connector to sunlight and look at other connector. Light should come from the connector. Modulation of the source by waving a finger in front of the fiber will enhance visibility. If no light comes through, one or both connectors were put on incorrectly. In this case, attach new connectors. **NEVER LOOK DIRECTLY INTO END WITH MAGNIFYING OPTICAL INSTRUMENTS WHEN LED IS ON – MAY DAMAGE EYES.**