

Model SFA-FFP Field Fiber Polisher

For Use with PICO-GUARD™ Field-Cut Mono-Core Fibers

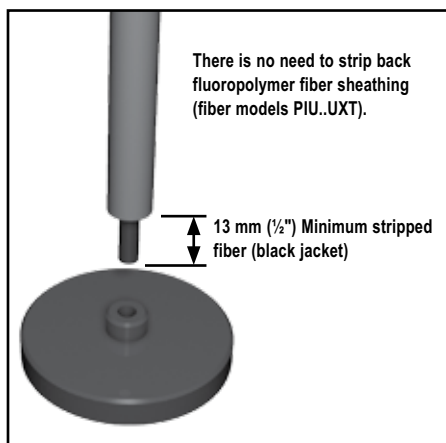


Figure 1. The stripped fiber fits snugly into the fiber holder.

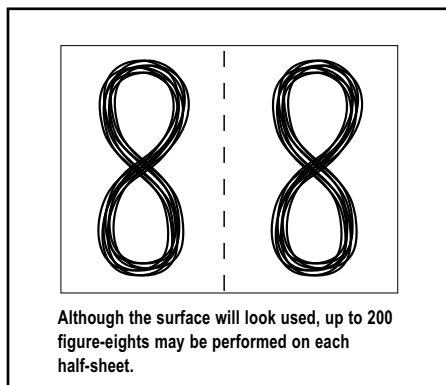


Figure 2. Trace the figure-eight pattern over each half of the 9" x 11" sheet.

Features

- Polishes fiber ends for minimum attenuation for mono-core fibers that are cut in the field; provides up to 95% of the performance of a factory-polished fiber
- Easy to use; one kit polishes 13 to 40 fiber ends, depending on the quality of the original cut and need for polishing
- Kit includes:
 - 9" x 11" sheet 1500 sandpaper to remove imperfections in the fiber cut
 - 9" x 11" sheet 1 micron lapping film to fine-polish the fiber end
 - 1" dia. x 1/2" thick plastic fiber holder with 0.090" center hole to position fiber
 - PFC-2 fiber cutter

Instructions

Considerations

Fibers are polished using a figure-eight (∞) motion. If the fiber cut is clean (no scratches or miscuts), fewer figure-eights are required to achieve a good polish.

Each cutting port in the PFC-2 fiber cutter is designed to be used only once. If a fiber is cut in a port that is used only once, the cut typically can be considered good. After making the final cut (step #3), inspect the fiber end (a magnifying glass may be helpful to determine cut quality).

Each polishing surface can withstand up to 400 figure-eights (200 on each half of the 9" x 11" sheet). Therefore, one kit can polish 13 to 40 fiber ends, depending on the quality of the initial cut.

Procedure

1. Precut the fiber roughly to the desired length (an inch or two longer than the finished length) using a scissors or side cutter.
2. If the fiber has the optional PVC sheathing (models PIU..UXP), strip the fiber jacket from the end of the fiber, adequate for the device into which the fiber will ultimately be used. The fiber holder requires a minimum 1/2" of polyethylene fiber (black jacket). There is no need to strip back fluoropolymer fiber sheathing (fiber models PIU..UXT).
3. Using the PFC-2 cutter, cut the fiber to the proper length. Verify that the fiber length is adequate for the device into which the fiber will ultimately be used (see step #2).
4. Insert the fiber end into the center hole of the fiber holder. Place the 1500 grit sandpaper face-up on a clean flat surface. Holding the fiber in place vertically in the fiber holder, move the fiber and holder over the sandpaper in a figure-eight motion, 10 times.
5. After 10 figure-eights, inspect the fiber end to determine if additional polishing is required.

Good cut (absence of major flaws): typically 10 figure-eights are sufficient
Poor cut (large scratches): typically 30 figure-eights are required
 Perform the required number of additional figure-eights, until the fiber end appears free of obvious scratches or imperfections.
6. Place the 1 micron lapping film face-up on a clean flat surface. Repeat the figure-eight motion on this surface, 10 times.
7. Remove the fiber, blow off any dust, and install into the PICO-GUARD device.

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