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IF-FC1

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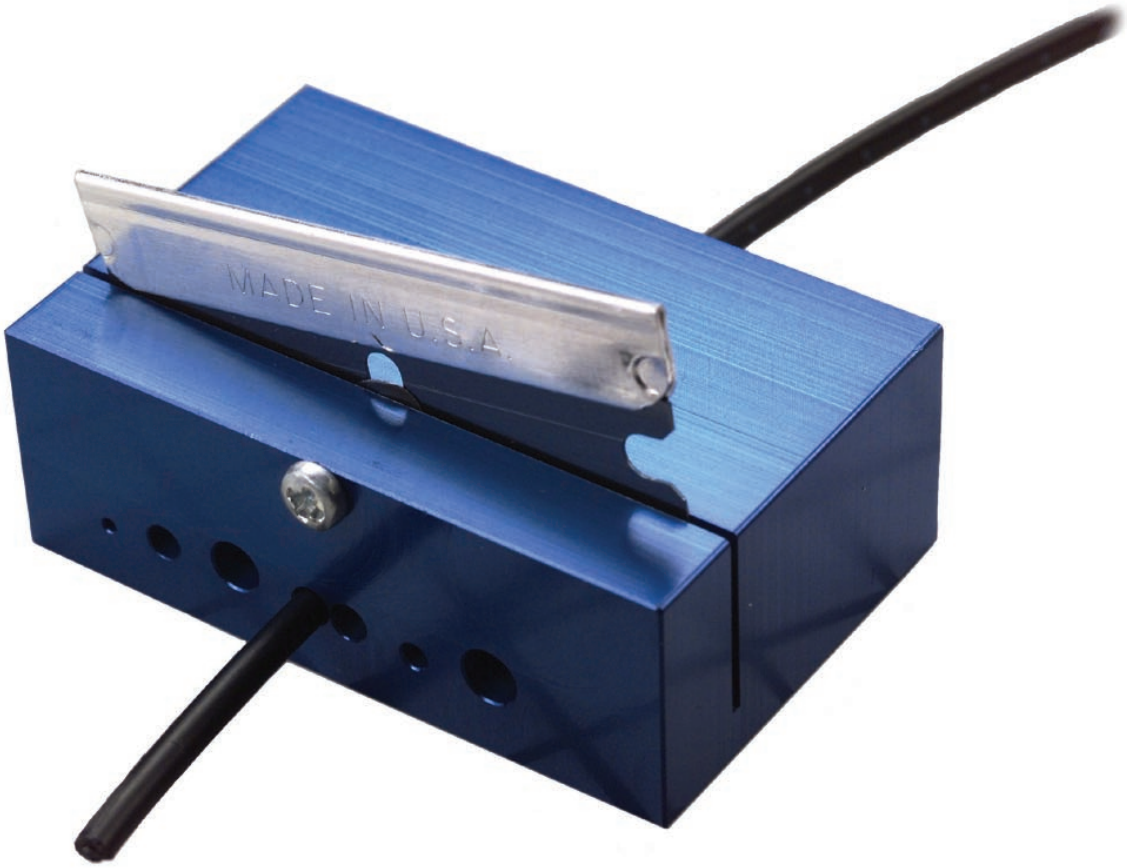
POF Cutter Block

Operating Instructions



Model Number:

IF FC1

Introduction

Congratulations on your purchase of Industrial Fiber Optics' POF Cutter Block. This instruction sheet contains all the information you need to operate this device safely and knowledgeably, even if you are new to fiber optics and fiber termination procedures. Please read carefully before operating.

As soon as you receive this fiber cutter, inspect it and its shipping container. Besides this instruction sheet, the cutter product consists of:

- Fiber cutter body with installed razor blade
- 2-56 x ½ inch screw for blade retention
- #2 wave washer
- 4 Extra KEEN single-edge razor blades

If parts are missing please contact us immediately for replacement. If the cutter has been damaged during shipping, immediately notify the shipping carrier.

Industrial Fiber Optics makes every effort to incorporate state-of-the-art technology, highest quality, and dependability in its products. We constantly explore new ideas and products to best serve the rapidly expanding needs of industry and education. We encourage comments that you may have about our products, and we welcome the opportunity to discuss new ideas that may better serve your needs.

Thank you for selecting this Industrial Fiber Optics product. We hope it meets your expectations and provides many hours of productive activity.

General Information

The POF Cutter Block has been designed exclusively for cutting plastic optical fiber. Do not attempt to cut glass fiber.

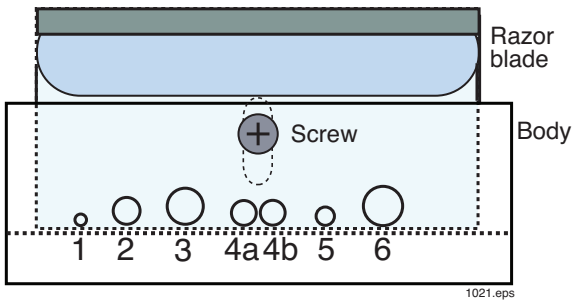


Figure 1. Front view of the fiber cutter with the fiber apertures numbered.

Upon inspection of the fiber cutter you will find seven holes or apertures as shown in **Figure 1**. The apertures are precisely drilled holes for optimal cutting of the most commonly used plastic optical fibers. See **Table** 1 to determine the proper aperture for the fiber you wish to cut. If you do not find the fiber listed, please refer to the aperture sizes in **Table 2**. Choose the closest aperture size that exceeds the overall diameter of the fiber.

To eliminate a step when working with jacketed duplex fiber, the cutter splits the jacket at

Table 1. Recommended apertures for various fibers.

Fiber Type	Aperture
750 µm core, 2.2 mm jacketed simplex	4a or 4b
1000 µm core, 2.2 mm jacketed simplex	4a or 4b
750 µm core, jacketed duplex	4a and 4b
1000 µm core, jacketed duplex	4a and 4b
750 µm core bare fiber	1
1.5 mm core, jacketed simplex	3
1000 µm core bare fiber	5
1.5 mm core bare fiber	5
2.0 mm bare fiber	2
3.0 mm bare fiber	3
16-fiber 265 µm core, light bundle	4a or 4b
24-fiber 265 µm core, light bundle	3
32-fiber 265 µm core, light bundle	3
64-fiber 265 µm core light bundle	6

Fiber Cutting Procedure

To cut fiber with this cutter please complete the following steps:

- Select the correct aperture for the fiber being cut.
- Pull up the razor blade.
- Push fiber into the selected aperture until it extends 2 mm beyond the razor blade.
- Press down on the top of the razor blade until the fiber is cut through.
- Pull up the razor blade and remove fiber.

Replacement Blades

The replacement blades for this cutter are the same physical size as single-edge razor blades available at most hardware stores. We recommend “Extra KEEN” single-edge blades because they produce superior terminations when cutting most fiber except the 3.0 mm core bare type. Our part number for the Extra KEEN blade in packages of 100 is IF-FC1-RP1. For the 3.0 mm bare fiber, we recommend standard-edge blades. The replacement package of 100 standard

Table 2. Hole diametersfor individual apertures.

	Size (in)	Size (mm)
1	.035	.88
2	.086	2.184
3	.125	3.175
4a	.0935	2.375
4b	.0935	2.375
5	.0635	1.613

Blade Replacement Procedure

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To replace the fiber cutter blade complete the following steps:

- Using a size 1 Phillips screwdriver remove the 2-56 screw.
- Adjacent to the razor blade is a #2 wave washer. Remove the washer and dull razor blade from the cutter body.
- Dispose of the razor blade carefully.
- Place a new single-edge razor blade and wave washer into the slot.
- Align blade, wave washer and screw holes and then re-insert the 2-56 screw.
- Tighten the 2-56 screw so a slight amount of friction is placed on the razor blade.

For longer blade life, rotate a worn blade 180 degrees and re-install. This places a new portion of the blade into use in relationship to a particular aperture.

Warranty

Industrial Fiber Optics products are warranted against defects in materials and workmanship for 90 days. The warranty will be voided if internal or external components have been damaged, mishandled, or altered by the buyer.

Warranty liability is limited to repair or replacement of any defective unit at the company's facilities, and does not include attendant or consequential damages. Repair or replacement can be made only after failure analysis at the factory. Authorized warranty repairs are made at no charge, and are guaranteed for the balance of the original warranty.

Industrial Fiber Optics will pay the return freight and insurance charges for warranty repair within the continental United States, by United Parcel Service or Parcel Post. Any other delivery means must be paid for by the customer. The costs of return shipments for a fiber cutter no longer under warranty must be paid by the customer. If an item is not under warranty, repairs will not be undertaken until the cost of such repairs has been prepaid by the customer.

When returning items for analysis and possible repair, please do the following:

- In a letter, describe the problem, name of the person whom we should contact, phone number and return address.
- Pack the fiber cutter, instruction sheet and your letter carefully in a strong box with adequate packing material to prevent damage in shipment.
- Ship the package to: