# Plastic Optical Fiber Termination Cutter for 2.2 mm POF



# Datasheet

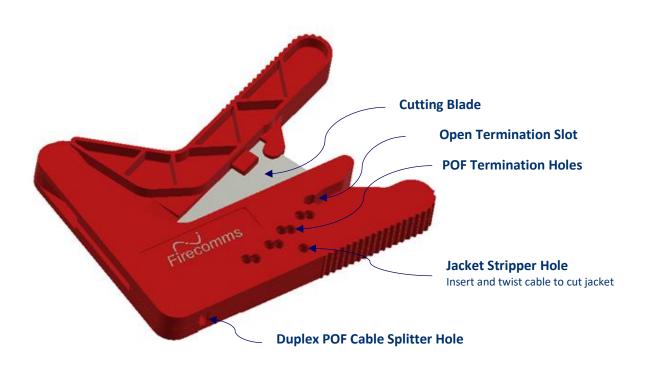


# DESCRIPTION

The Firecomms POF cutter is a simple low-cost disposable tool for terminating standard 2.2 mm plastic optical fiber (POF). The tool is designed to enable a small number of high quality POF terminations either in a field installation setting or within a laboratory environment without the need to perform a subsequent polishing step. The tool is designed in particular to prepare POF terminations for use with Firecomms' OptoLock<sup>®</sup> plug-less transceivers.

# **FEATURES**

- Termination for 2.2 mm POF Cables
- Enables high quality POF facets without the need for a subsequent polishing step
- Cost-effective
- Suitable for simplex and duplex POF
- Manually operated and easy to use by untrained personnel
- Safe design ensures cutting edge of blade is fully enclosed at all times
- RoHS compliant





## USAGE

# **Cutting Blade and POF Termination**

Use the 'open' slot to cut off the required length of POF from a reel (figure 1). Insert POF cable into one of the four provided termination holes and cut to a flush finish (figure 2)



FIGURE 1. Cutting POF cable on the 'open' slot



FIGURE 2. POF cutter in process of cutting POF cable located in one pair of 'Termination' Holes

#### **Termination Finish**

Each pair of termination holes can provide up to approximately <u>x15 high quality flush POF cuts</u>. Beyond this figure a poorer finish can be expected which can incur additional optical coupling loss.

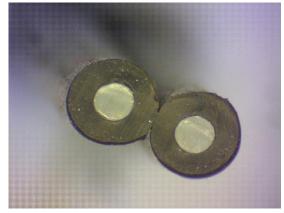


FIGURE 3. High quality termination finish



FIGURE 4. Poor quality termination finish



#### **Duplex POF Splitter**

To split the duplex POF along the zip line simply fully insert each end of the cable into the 'splitter' hole. Once removed the two POF strands can be easily separated along the zip line by pulling the two stands apart by hand.



FIGURE 5. Insertion of duplex POF

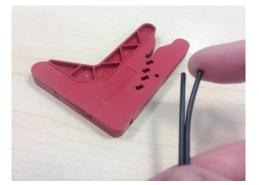


FIGURE 6. Separate strands

#### **POF Jacket Removal**

To remove a section of the POF jacket from a simplex POF cable, insert the cable into the 'jacket stripper' hole with the cutter open. Once inserted, fully close the cutter and then twist the cutter around the cable for one complete revolution. With the cutter still closed, remove the cable from the cutter to reveal the stripped jacket exposing only the POF fiber core. Repeat for each of the other fiber ends.



FIGURE 7. Insertion of POF cable into jacket stripper

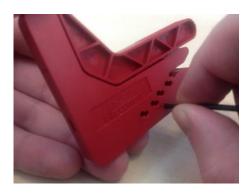


FIGURE 9. Twisting the cutter around the cable one full revolution



FIGURE 8. Closing of cutter



FIGURE 10. Reveal the POF fiber



## DIMENSIONS

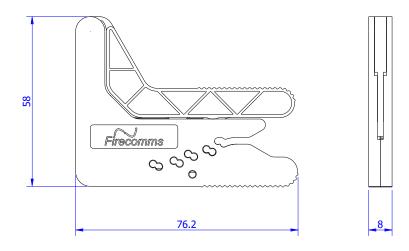


FIGURE 11. Firecomms PC220F-410 POF Cutter

#### **Ordering Information**

Part Number	Name	Description
PC220F-410	POF Cable Termination Cutter	POF cutter used for terminating and splicing 2.2 mm POF. Jacket stripping feature also available.

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