

FHS-UV and FHS-VIS In-line Filter Holders

The **FHS-UV** and **FHS-VIS IN-LINE FILTER HOLDERS** are low-cost spectrophotometric accessories for fast, convenient absorbance/transmission measurements of optical and other filters. Optimized for VIS-Shortwave NIR (~360-1000 nm) or UV-VIS-Shortwave NIR (200-1100 nm) measurements, each holder has a pair of 5-mm diameter f/2 collimating lenses to maximize light throughput, and comes with a manual light-block wheel for taking dark readings.

The FHS In-line Filter Holder accepts 1" round or any size >1/2" square optical filters, up to 1/4" (6 mm) in thickness. Plastic supports hold SMA-terminated fibers steady during use. The light that passes through the filter is collimated. This process makes it possible to measure either glass or interference filters.

Operation

Installing Filters

1. Loosen the filter thumb wheel on the left side of the filter holder to create enough space for the filter you wish to use.
2. If the filter is round, place it in the filter slot.
3. If the filter is square, place it in the filter slot at a 45° angle, so the filter is in the beam path.
4. Clamp the filter in place by tightening the thumb wheel.
5. When filters are not being used in the holder, tighten the thumb wheel completely.

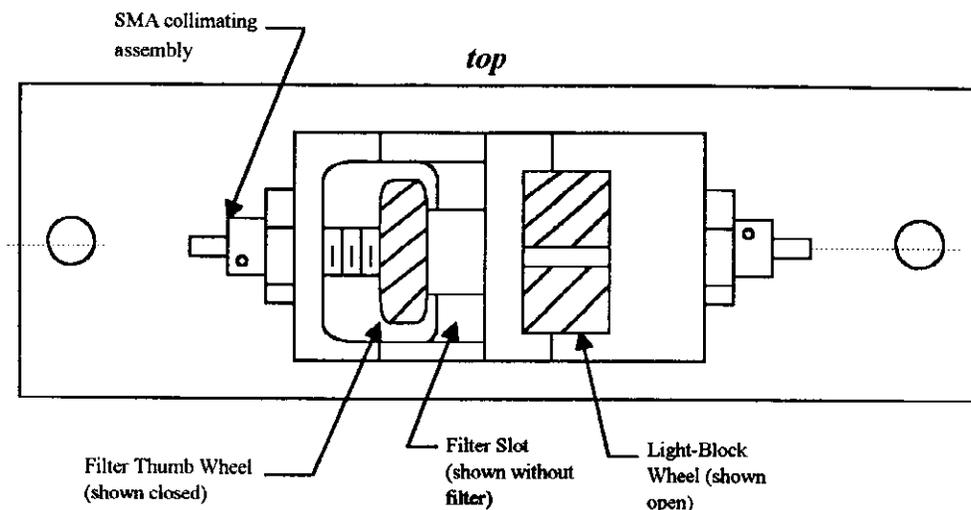
Using the Fiber Supports

1. Snap the clamps around the fibers after the fibers are screwed into the light source and spectrometer.
2. Lift the clamps until they support the fibers.
3. Unsnap the clamps to remove the fibers.

Using the Shutter

Use the shutter to take dark readings.

- ◆ The shutter is in the **OPEN** position when the knurled light-block wheel shows a scored depression (shown open on the drawing).
- ◆ The shutter is in the **CLOSED** position when the light-block wheel is rotated so only the knurling shows (the wheel will lock into this position with a positive action).



Specifications

FHS-VIS Collimating lenses (VIS-NIR):	BK 7 glass (~360 nm - 2 μm^*) 5 mm diameter f/2
FHS-UV Collimating lenses (UV-VIS-NIR):	Dynasil 1100 quartz (~200 nm - 2 μm^*) 5 mm diameter f/2
Collimating lens termination:	SMA 905
Filter slot:	accepts filters 1" round or any size >1/2" square, up to 1/4" (6 mm) in thickness
Base material:	aluminum

* Though the product can be used to 2 μm , it can be configured to "see" only to 1100 nm with our S2000 spectrometer.