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# FKLP01-IR - October 13, 2021

Item # FKLP01-IR was discontinued on October 13, 2021. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

## EDGEPASS FILTER KITS



#### <u>Hide Overview</u>

### OVERVIEW

#### **Applications**

- Emission Filters in Fluorescence Applications
- Order Sorting Filters for Photometry
- Stray Light or Trim Filters to Eliminate any Unwanted Near Band Radiation
- Raman Spectroscopy Filters
- Astronomy Applications

Thorlabs' Edgepass Filter Kits each contain 10 mounted longpass or shortpass filters for isolating regions of the visible or IR spectrum. Each filter is mounted in an unthreaded  $\emptyset$ 1" black anodized aluminum ring that can be placed into our selection of filter mounts or  $\emptyset$ 1" lens tubes using retaining rings. The filters are packaged in a plastic storage box. Detailed specifications can be found in the table below.

Our edgepass filters are constructed of durable dielectric coatings and will withstand the normal cleaning and handling associated with any high-quality optical component. Their film construction is essentially a modified quarter-wave stack, using interference effects, rather than absorption, to isolate their spectral bands. Thus, unlike colored filter glass, the cut-off/cut-on wavelength will be shifted to shorter wavelengths with an increase in the angle of incidence. This feature can be useful in applications where it is desirable to fine tune the location of the cut-on or cut-off wavelength. Our edgepass filters are hermetically sealed for maximum humidity protection and may be combined for custom bandpass filters.

Longpass Filters	Shortpass Filters
-	~400 nm to Cut-off



Transmission at Peak	80% (400 - 700 nm) 75% (750 - 1000 nm) 70% (>1000 nm)	70% (<500 nm) 70% (500 - 540 nm) 80% (550 - 1000 nm)	
Cut-On or Cut-Off Tolerance (Δλ@ 50% of Peak)	±3 nm to 750 nm ±15 nm to 1000 nm	±3 nm to 750 nm ±15 nm to 1000 nm	
Rejection Region	0.01% abs., 0.01% 200 nm to Cut On	0.01% abs., 0.0001% avg. (1.3X Cut-Off)	
Cut-Off Slope	3% OD = 0.3 to OD = 4	4-5%, OD = 0.3 to OD = 4	
Construction	Immersed Dielectric		
Scratch/Dig	80/50 per Mil-0-13830A		
Substrate Material	Soda Lime o	or Equivalent	

To inquire about our custom edgepass filter options, including the possibility of alternative cut-on or cut-off wavelengths, please contact Tech Support. Please note that there is a significant lead time and tooling cost associated with custom filters that makes the purchase of only a few pieces fairly costly.

#### Hide Visible Shortpass Filter Kit

#### **Visible Shortpass Filter Kit**

Item #	Transmission Data <sup>a</sup>	Cut-Off Wavelength	Item #	Transmission Data <sup>a</sup>	Cut-Off Wavelength
FES0450	0	450 nm	FES0700	0	700 nm
FES0500	0	500 nm	FES0750	0	750 nm
FES0550	0	550 nm	FES0800	0	800 nm
FES0600	0	600 nm	FES0900	0	900 nm
FES0650	<b>(</b> )	650 nm	FES1000	<b>(</b> )	1000 nm

• a. The shaded regions in these graphs denote the spectral ranges over which we recommend using these filters. Please keep in mind that the data given is typical, and performance may vary from lot to lot, particularly outside of the shaded regions.

Part Number	Description	Price	Availability
FKSP01	Visible Shortpass Filter Kit, Mounted, Set of 10	\$836.47	Today

#### Hide Visible Longpass Filter Kit

#### Visible Longpass Filter Kit

	Transmission			Transmission	
Item #	Data <sup>a</sup>	Cut-On Wavelength	Item #	Data <sup>a</sup>	Cut-On Wavelength
FEL0500	0	500 nm	FEL0750	0	750 nm
FEL0550	0	550 nm	FEL0800	0	800 nm
FEL0600	0	600 nm	FEL0850	0	850 nm
FEL0650	1	650 nm	FEL0900	1	900 nm
FEL0700	1	700 nm	FEL0950	1	950 nm

• a. The shaded regions in these graphs denote the spectral ranges over which we recommend using these filters. Please keep in mind that the data given is typical, and performance may vary from lot to lot, particularly outside of the shaded regions.

Part Number	Description	Price	Availability
FKLP01-VIS	Visible Longpass Filter Kit, Mounted, Set of 10	\$836.47	Today

#### Hide IR Longpass Filter Kit

## **IR Longpass Filter Kit**

	Transmission			Transmission	
Item #	Data <sup>a</sup>	Cut-On Wavelength	Item #	Data <sup>a</sup>	Cut-On Wavelength
FEL1000	0	1000 nm	FEL1250	0	1250 nm
FEL1050	0	1050 nm	FEL1300	0	1300 nm
FEL1100	0	1100 nm	FEL1350	0	1350 nm
FEL1150	1	1150 nm	FEL1400	1	1400 nm
FEL1200	1	1200 nm	FEL1500	1	1500 nm

• a. The shaded regions in these graphs denote the spectral ranges over which we recommend using these filters. Please keep in mind that the data given is typical, and performance may vary from lot to lot, particularly outside of the shaded regions.

Part Number	Description	Price	Availability
FKLP01-IR	IR Longpass Filter Kit, Mounted, Set of 10	\$836.47	5-8 Days







