

FKLP01-VIS - October 13, 2021

Item # FKLP01-VIS 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

- ▶ 10 Mounted Edgepass Filters in Each Kit
- ▶ Longpass & Shortpass Filter Kits
- ▶ IR & Visible Longpass Filters

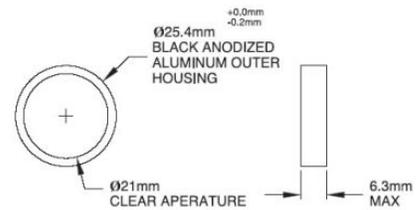


[Hide Overview](#)

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 Ø1" black anodized aluminum ring that can be placed into our selection of filter mounts or Ø1" 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.

| Specifications | Longpass Filters | Shortpass Filters |
|---------------------|------------------|--------------------|
| Transmission Region | - | ~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 ($\Delta\lambda$ @ 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 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 ^a | Cut-Off Wavelength | Item # | Transmission Data ^a | Cut-Off Wavelength |
|---------|--------------------------------|--------------------|---------|--------------------------------|--------------------|
| FES0450 | | 450 nm | FES0700 | | 700 nm |
| FES0500 | | 500 nm | FES0750 | | 750 nm |
| FES0550 | | 550 nm | FES0800 | | 800 nm |
| FES0600 | | 600 nm | FES0900 | | 900 nm |
| FES0650 | | 650 nm | FES1000 | | 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

| Item # | Transmission Data ^a | Cut-On Wavelength | Item # | Transmission Data ^a | Cut-On Wavelength |
|---------|--------------------------------|-------------------|---------|--------------------------------|-------------------|
| FEL0500 | | 500 nm | FEL0750 | | 750 nm |
| FEL0550 | | 550 nm | FEL0800 | | 800 nm |
| FEL0600 | | 600 nm | FEL0850 | | 850 nm |
| FEL0650 | | 650 nm | FEL0900 | | 900 nm |
| FEL0700 | | 700 nm | FEL0950 | | 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 |

IR Longpass Filter Kit

| Item # | Transmission Data ^a | Cut-On Wavelength |
|---------|---|-------------------|
| FEL1000 |  | 1000 nm |
| FEL1050 |  | 1050 nm |
| FEL1100 |  | 1100 nm |
| FEL1150 |  | 1150 nm |
| FEL1200 |  | 1200 nm |

| Item # | Transmission Data ^a | Cut-On Wavelength |
|---------|---|-------------------|
| FEL1250 |  | 1250 nm |
| FEL1300 |  | 1300 nm |
| FEL1350 |  | 1350 nm |
| FEL1400 |  | 1400 nm |
| FEL1500 |  | 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 |



