

Linear Variable Shortpass Filter



Stock **#83-983** **5 In Stock**

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£1,440^{.00}

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Volume Pricing	
Qty 1-9	£1,440.00 each
Qty 10-25	£1,296.00 each
Qty 26-49	£1,231.20 each
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Product Downloads

General

Type:

Shortpass Filter

Physical & Mechanical Properties

Dimensions (mm):	
60.0 x 15.0	
Length (mm):	
60.00	

3.00	Thickness (mm):
15.00	Width (mm):
0.2 x 8.0	Aperture (mm):

Optical Properties

≥3.0	Optical Density OD (Average):
Fused Silica (Corning 7980)	Substrate: ☐
Variable	Coating:
Edge: 340 - 420nm, >3.0 to 725nm Edge: 420 - 500nm, >3.0 to 850nm Edge: 500 - 850nm, >3.0 to 860nm	Optical Density Steps:
>70	Transmission (%):
Edge: 340 - 420nm, >70% over 20nm Edge: 420 - 500nm, >85% over 40nm Edge: 500 - 850nm, >92% over 40nm	Transmission Steps (%):
1.6	Slope Factor (%):
0.57	Linear Dispersion (%):
340 - 850	Wavelength Range (nm):

Regulatory Compliance

Compliant	RoHS 2015:
Compliant	Reach 223:
View	Certificate of Conformance:

Product Details

A Linear Variable Edge Filter has an interference coating intentionally wedged in one direction to create a linear shift of the center wavelength across the length of the substrate. This shift allows for the broad filtering capabilities demonstrated by the linear variable shortpass, longpass, and dichroic edge filters. Shortpass and longpass edge filters work inversely of one another; the shortpass filter passes light throughout the filter's length until a blocking band is reached, whereas the longpass filter blocks light until a transmission band is reached. Blocking and transmission bands are adjustable by reorienting the filter to the light source.

With its broad blocking and transmission range, a single Linear Variable Edge Filter can replace an entire filter set. When synchronized with a single moving grading spectrometer, combined longpass and shortpass edge filters reduce scatter light and harmonics. In addition, combined linear variable filters can be used as a single variable excitation filter for various fluorescence applications using white light sources.

- Use in Pairs to Create High Efficiency Custom Bandpass Filters
- Optimum Input Beam Diameter of 0.2 x 8.0mm
- OD3 Blocking
- [Linear Variable Bandpass Filters](#) Also Available

Linear Variable Edge Filters are designed to be used individually or in pairs to selectively block or transmit targeted wavelengths. Linear Variable Edge Filters are available as longpass, shortpass, or dichroic filters. Longpass edge filters transmit wavelengths greater than the cut-on wavelength, whereas shortpass edge filters transmit wavelengths shorter than the cut-off wavelength. Dichroic edge filters operate similarly to longpass edge filters, but ensure that unwanted wavelengths are reflected. When combined, Linear Variable Edge Filters can operate as laser line filters or variable bandpass filters with tunable center wavelengths and bandwidths.