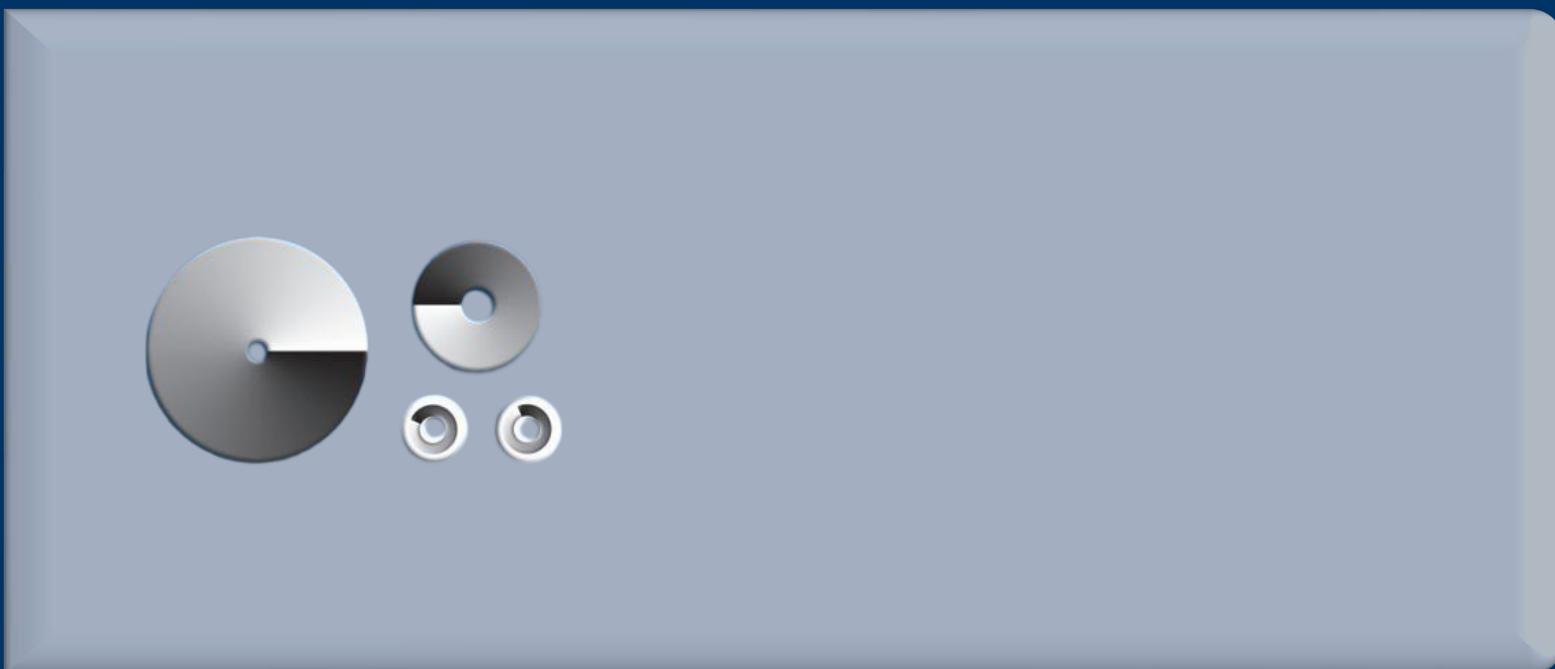


# Optical Filter

## Circular Variable Neutral Density Filter

Rotational Continuous Intensity

- Rotational Adjustment
- Broadband Neutrality
- Wide Dynamic Range
- Dual Sizes



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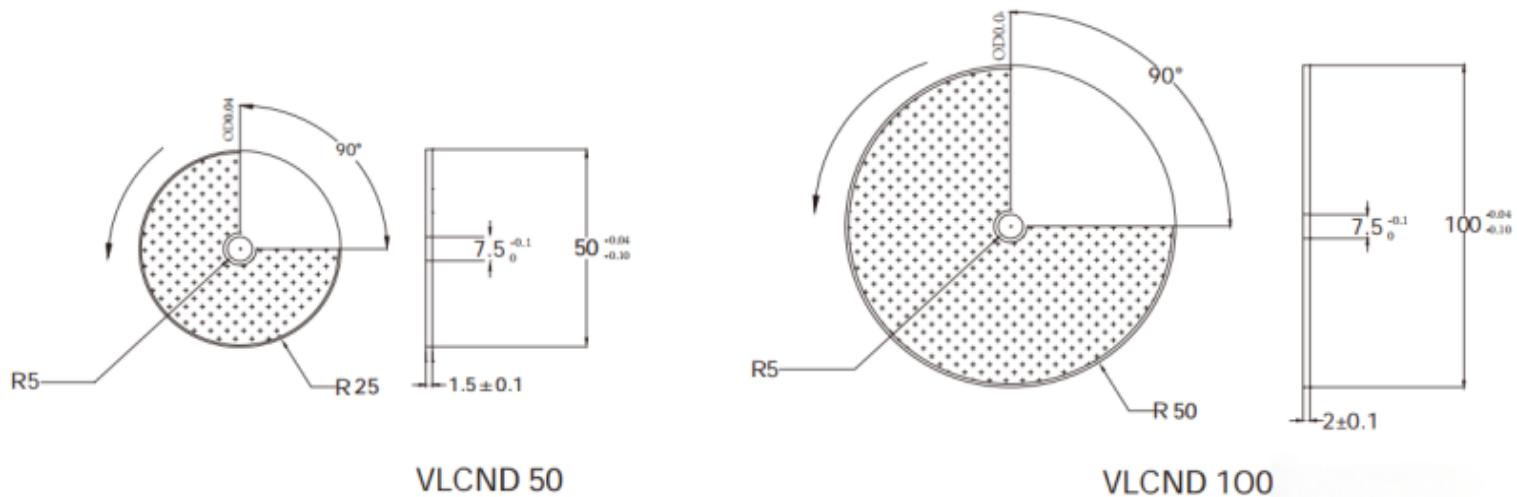
## Overview

### Dynamic Control: Stepless Intensity Tuning via Precision Rotation

The VenusLab VLCND Series addresses the inflexibility of fixed filters in handling varying light intensities. These filters feature a coating where optical density gradients along the angle. Maintaining spectral neutrality, they can be used to dynamically adjust the total transmitted light energy of a system or control the intensity distribution across the beam cross-section.

Available in **50mm** and **100mm** standard sizes, the recommended operating range is **400-700nm** (Visible), with substrate support extending to **2000nm** for NIR applications. The center hole design facilitates mounting on rotating shafts, making them ideal components for laboratory research and industrial instrument integration.

### Dimensions:



## Qualification

### Circular Variable Filter Technical Specifications

Technical Parameter	Specification Data
Filter Type	Circular Variable Neutral Density
Wavelength Range	380 - 2000 nm
Recommended Wavelength	400 - 700 nm
Optical Density Range	0.04 - 4.0 (Model Dependent)
Available Diameters	50mm, 100mm
Adjustment Method	Rotational

## Selection Chart

### VLCND Series Ordering Information & Model List

Model	Size (mm)	OD Range	Wavelength (nm)
VLCND-50-1.0	50	0.04-1.0	380-2000
VLCND-50-1.5	50	0.04-1.5	380-2000
VLCND-50-2.0	50	0.04-2.0	380-2000
VLCND-50-3.0	50	0.04-3.0	380-2000
VLCND-50-4.0	50	0.04-4.0	380-2000
VLCND-100-1.0	100	0.04-1.0	380-2000
VLCND-100-1.5	100	0.04-1.5	380-2000
VLCND-100-2.0	100	0.04-2.0	380-2000
VLCND-100-3.0	100	0.04-3.0	380-2000
VLCND-100-4.0	100	0.04-4.0	380-2000

## Explore Series

Model	OD Range	Size (mm)	Wavelength (nm)
VLCND-50-2.0	0.04-2.0	50	380-2000

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

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