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## 12.5mm Dia, Absorptive ND Filter Kit (14 Filters)

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Stock #63-468 **1 In Stock**

⊖ 1 ⊕ €373.<sup>00</sup>

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### Product Downloads

### General

**Filters Included :**  
0.1, 0.15, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.9, 1.0, 1.3, 1.5, 2.0, 2.5

**Type:**  
Neutral Density Filter

### Physical & Mechanical Properties

**Diameter (mm):**  
12.50

## Optical Properties

ND Filter Glass      **Substrate:** □

Uncoated      **Coating:**

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400 - 700      **Blocking Wavelength Range (nm):**

0.4 - 0.7      **Wavelength Range (µm):**

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## Regulatory Compliance

[View](#)      **Certificate of Conformance:**

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## Product Details

- Attenuates Visible Light Via Absorption, Rather than Reflection
- Multiple Filters Can be Stacked for Increased Blocking
- Optical Densities from 0.1 to 4.0 are Available
- Also Available [Pre-mounted in C-Mount Housings](#)

Hoya Absorptive Neutral Density (ND) Filters possess level spectral transmittance characteristics in the visible region and attenuate light by absorption with minimal reflection. Typically, the neutrality and density of absorptive filters are a function of the material and the thickness. Since Hoya neutral density filters are held to a specific optical density, the thickness is only a function of the glass type. Hoya Absorptive Neutral Density (ND) Filters are useful in light control applications for measuring instruments and exposure control in imaging. Spectral variations occur as optical density increases.

Optical Density exhibits an additive relationship; for example, stacking filters with OD values of 0.6 and 0.9 yields a resultant density of 1.5. The optical density is related to the transmission by the following equation:  $T = 10^{-OD} \times 100 =$  percent transmission.

**Note:** Due to supply chain issues, our kits may be delivered with an alternative packaging solution in place of a wooden box. For any questions, please contact [kits@edmundoptics.com](mailto:kits@edmundoptics.com).

### Filter Simulation Software

[Click here](#) to download HOYA's colored glass filter simulation software which can be used to calculate the internal transmittance and external transmission of each HOYA glass type. The software can simulate the performance of individual filters with user specified thickness.

### Absorptive Neutral Density Filter Kits

[#55-222](#) includes 6 filters in optical density values of 0.15, 0.3, 0.4, 0.6, 0.9 and 2.5.

[#63-468](#), [#63-469](#), [#63-470](#) and [#66-155](#) each include 14 filters in optical density values of 0.1, 0.15, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.9, 1.0, 1.3, 1.5, 2.0 and 2.5. Please note that OD 3.0 is the only one not included in these kits.

## Technical Information

