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/ [Hoya Absorptive Neutral Density](#)

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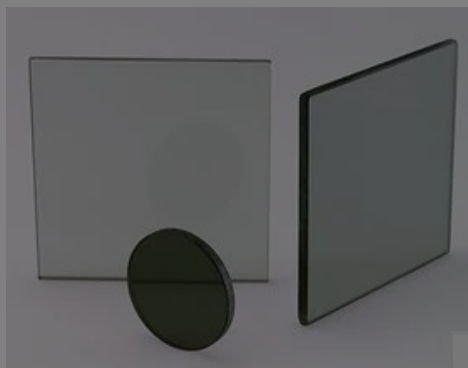
4 OD 12.5mm Di

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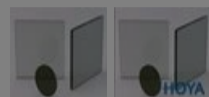


Stock #36-272 **20+ In Stock**

1

€35^{,75}

ADD TO CART



Volume Pricing

Qty 1-10	€35,75 each
Qty 11-49	€32,50 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
- [Download All](#)

General

Type: Neutral Density Filter

Physical & Mechanical Properties

Diameter (mm): 12.50

Thickness (mm): 2.85 ±0.5

Dimensional Tolerance (mm): ±0.1

Parallelism (mm): <0.02

Optical Properties

Optical Density OD (Average): 4.00 ±0.2

Glass/Filter Number: **Hoya ND006**

Substrate: ND Filter Glass

Coating: Uncoated

Index of Refraction (n_d): 1.531

Surface Quality: 80-50

Transmission (%): 0.01 (average)

Blocking Wavelength Range (nm): 400 - 700

Material Properties

Transformation Temperature (°C): 542.00

Regulatory Compliance

RoHS 2015: **Compliant**

REACH 201: **Compliant**

Need different specifications?

Edmund Optics offers comprehensive custom manufacturing capabilities to meet your specific requirements. Whether in the prototyping phase or ready for volume production, our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

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Application
s. Our experienced

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: $T = 10^{-OD} \times 100 = \text{percent transmission}$.

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.

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

Accessories

Note: Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us [here](#).

	Title	Compare	Stock Number	Price	Buy
MORE+	25mm Dia, Absorptive ND Filter Kit (6 Filters)		#55-222	€228,00 Request Quote	3 In Stock <input type="text" value="1"/>
MORE+	12.5mm Dia, Absorptive ND Filter Kit (14 Filters)		#63-468	€373,00 Request Quote	CONTACT US <input type="text" value="1"/>
MORE+	25mm Dia, Absorptive ND Filter Kit (14 Filters)		#63-469	€495,00 Request Quote	4 In Stock <input type="text" value="1"/>
MORE+	50mm Square, Absorptive ND Filter Kit (14 Filters)		#63-470	€1.175,00 Request Quote	CONTACT US <input type="text" value="1"/>
MORE+	50mm Dia, Absorptive ND Filter Kit (14 Filters)		#66-155	€1.175,00 Request Quote	1 In Stock <input type="text" value="1"/>

Related Products

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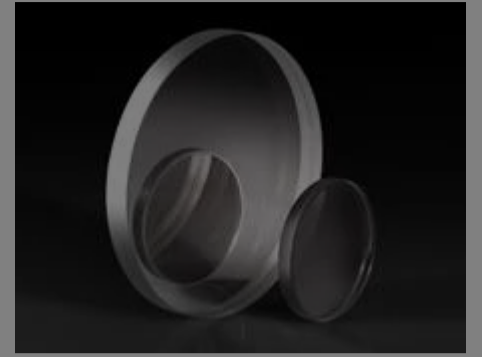
Manual Cage Filter Wheel



Fixed/Multiple Filter Mounts



Optics Cleaning Brushes

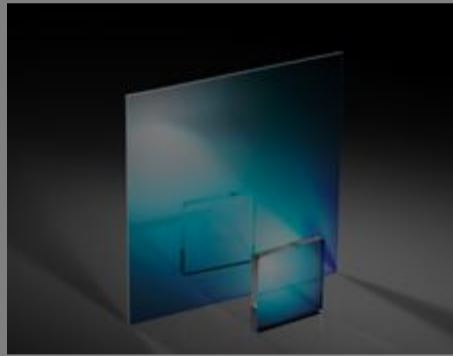


UV-NIR Neutral Density (ND) Filters

Frequently Purchased Together



#30-938 - 2.0 OD 25mm Diameter, Reflective ND Filter
€55,95



#31-413 - 20 x 37mm, 50R/50T, Plate Beamsplitter
€56,50



























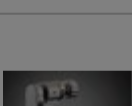



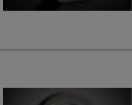

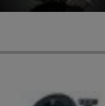

#32-303 - 6.25mm Dia. x 20mm FL, MgF₂ Coated, Achromatic Doublet Lens
€71,00



#33-255 - 12.7mm Dia f/0.5 Uncoated, Molded Acrylic Aspheric Lens
€62,00



Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	12.5/12.7mm Optic Dia., SM05 Thin Mount, M4	Fixed		#13-789	€19,50 Request Quote	10 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., SM05 Thin Mount, 8-32	Fixed		#13-790	€19,50 Request Quote	17 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-865	€43,50 Request Quote	CONTACT US <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., L-Slot Direct Mount	Fixed		#36-416	€59,00 Request Quote	17 In Stock <input type="text" value="1"/>
	12.5/12.7mm Optic Dia., Side Flange Direct Mount	Fixed		#36-418	€59,00 Request Quote	10 In Stock <input type="text" value="1"/>
	2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-668	€63,00 Request Quote	20+ In Stock <input type="text" value="1"/>
	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	€83,00 Request Quote	20+ In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
MORE+	 12.5/12.7mm Optic Dia., Kinematic Mount, 2-Screws				€93,00	20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., and Rotation Mount					20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Compact Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#34-720	€101,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	€102,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-853	€104,00 Request Quote	15 In Stock <input type="text" value="1"/> 
MORE+	 7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	€106,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	€108,00 Request Quote	CONTACT US <input type="text" value="1"/> 
MORE+	 7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	€116,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Compact Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#34-721	€117,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	€120,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	€157,00 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-814	€161,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-817	€182,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-955	€261,00 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+	 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	€410,00 Request Quote	CONTACT US <input type="text" value="1"/> 
MORE+	 12.5/12.7mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#84-640	€421,00 Request Quote	7 In Stock <input type="text" value="1"/> 

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	Title	Type	Compare	Stock Number	Price	Buy
MORE+		12.5/12.7mm Optic Dia., X Translating Mount			€429,00	5 In Stock <input type="text" value="1"/> 

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Resources

Media Type

- Application Note
- FAQ
- Glossary
- Video

APPLICATION NOTE

Understanding Neutral Density Filters

FAQ

What is an ND Filter?

FAQ

Can I place ND filters back-to-back and increase...

FAQ

What is the difference between using an absorptiv...

FAQ

How should I orient my reflective ND or interferenc...

GLOSSARY

Continuously Variable Apodizing Filter

[View More](#)