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# Hoya O54 (540nm), 12.5mm Dia., 2.5mm Thick, Colored Glass Longpass Filter

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 Stock #66-040 **20+ In Stock**

 - 1 + C\$51<sup>.80</sup>
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Volume Pricing	
Qty 1-10	C\$51.80 each
Qty 11-49	C\$46.20 each
Need More?	<a href="#">Request Quote</a>

Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	
EO Spec Sheet	<a href="#">Download All</a>

## General

**Type:** Longpass Filter

## Physical & Mechanical Properties

**Diameter (mm):** 12.50

**Thickness (mm):** 2.50 ±0.2

**Dimensional Tolerance (mm):** ±0.38

**Bevel:** Protective as needed

## Optical Properties

**Cut-Off Position  $\lambda_c$  (nm):** 540±6

**Cut-On Wavelength (nm):** 540.00 ±6

**Glass/Filter Number:** [Hoya O54](#)
**Substrate:** Colored Glass

**Coating:** Uncoated

**Color:** Orange

**Surface Quality:** 80-50

**Wavelength:** VIS

**Reflection Factor  $P_d$ :** 0.92

 **$\Delta\lambda$  (nm):** <25

**TH (%):** >85

## Material Properties

**Density (g/cm<sup>3</sup>):** 2.68

**Transformation Temperature (°C):** 560

## Regulatory Compliance

**RoHS 2015:** [Exempt](#)
**Reach 224:** [Compliant](#)

## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. 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](#).

## Product Details

- UV, VIS and IR Pass Ranges
- VIS Can Be Used for Color Bandpass
- Also Available **Mounted**

Hoya Colored Glass Longpass Filters feature a colored glass substrate. These filters are manufactured from substrates with inherently different absorption and transmission properties across a specific spectral region. Hoya Colored Glass Longpass Filters have UV, VIS, and IR pass ranges. A longpass filter has low transmission in the shortwave region (stopband) and high transmission in the longwave region (passband). These filters are also available in a **mounted** version.

### Longpass Filter Kits

Longpass filter kits are available in three different options: UV-VIS, VIS, or VIS-NIR. Each kit contains 8 filters in either 12.5mm diameter, 1" diameter, or 2" square.

UV-VIS Kit Contains: WG 295, WG 305, WG 320, L 37, GG 400, GG 420, GG 435, GG 455

VIS Kit Contains: GG 475, GG 495, OG 515, OG 530, OG 550, OG 570, OG 590, RG 610

VIS-NIR Kit Contains: RG 630, RG 665, RG 695, RG 715, RG 780, RG 830, RG 850, RG 1000

### Complete Filter Kits

Complete filter kits are available with 12.5mm diameter, 50.0mm diameter, 1" diameter, or 2" square filters. Each kit contains all 37 Longpass Glass Color Filter types.

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.

## Technical Information

$\lambda_s$	limit of stopband: specified at 0.001% internal transmittance
$\lambda_c$	cut-off position: specified at 50% internal transmittance
$\lambda_p$	limit of the passband
$t_{ip}$	internal spectral transmittance at $\lambda_p$
$\rho$	density
$T_g$	transformation temperature

## 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
<a href="#">MORE+</a>	VIS 12.5mm Dia Longpass Filter Kit		#47-847	C\$278.60 <a href="#">Request Quote</a>	1 In Stock <input type="text" value="1"/>
<a href="#">MORE+</a>	UV-VIS 12.5mm Dia Longpass Filter Kit		#47-846	C\$278.60 <a href="#">Request Quote</a>	1 In Stock <input type="text" value="1"/>

	Title	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a>	VIS-NIR 12.5mm Dia Longpass Filter Kit		#47-848	C\$278.60 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	VIS 25.4mm Dia Longpass Filter Kit		#47-399	C\$418.60 <a href="#">Request Quote</a>	1 In Stock 1
<a href="#">MORE+</a>	VIS-NIR 25.4mm Dia Longpass Filter Kit		#47-400	C\$418.60 <a href="#">Request Quote</a>	1 In Stock 1
<a href="#">MORE+</a>	UV-VIS 25.4mm Dia Longpass Filter Kit		#47-398	C\$418.60 <a href="#">Request Quote</a>	2 In Stock 1
<a href="#">MORE+</a>	UV-VIS 50mm Dia Longpass Filter Kit		#66-132	C\$838.60 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	VIS 50mm Dia Longpass Filter Kit		#66-133	C\$838.60 <a href="#">Request Quote</a>	1 In Stock 1
<a href="#">MORE+</a>	VIS-NIR 50mm Dia Longpass Filter Kit		#66-134	C\$838.60 <a href="#">Request Quote</a>	3 In Stock 1
<a href="#">MORE+</a>	Complete 12.5mm Dia Longpass Filter Kit		#66-135	C\$838.60 <a href="#">Request Quote</a>	1 In Stock 1
<a href="#">MORE+</a>	Complete 25.4mm Dia Longpass Filter Kit		#66-136	C\$1,818.60 <a href="#">Request Quote</a>	1 In Stock 1
<a href="#">MORE+</a>	Complete 50mm Dia Longpass Filter Kit		#66-137	C\$3,498.60 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	50/50.8mm Sq. Hoya/SCHOTT Colored Glass Longpass Filter Kit (8 Filters)		#17-014	C\$777.00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	50/50.8mm Sq. Hoya/SCHOTT Complete Colored Glass Longpass Filter Kit (37 Filters)		#17-017	C\$3,080.00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1

## Related Products



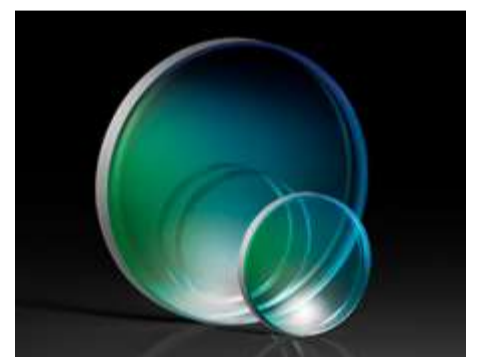
Manual Cage Filter Wheel



Fixed/Multiple Filter Mounts

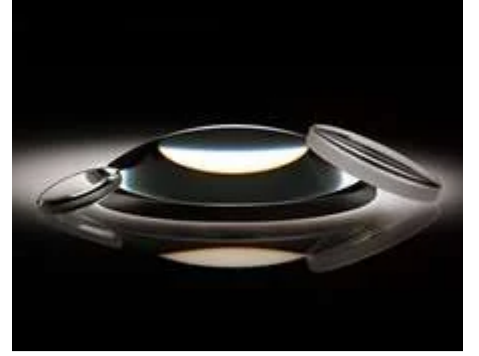
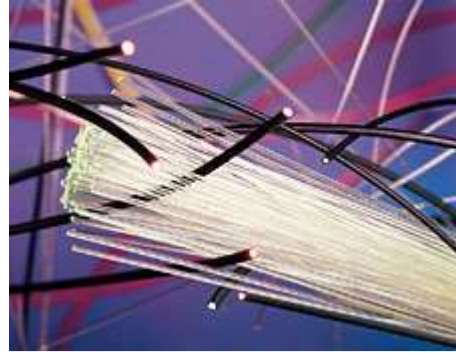
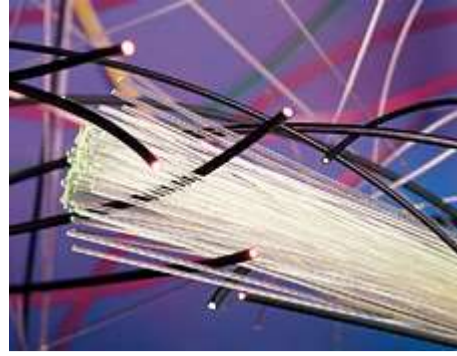
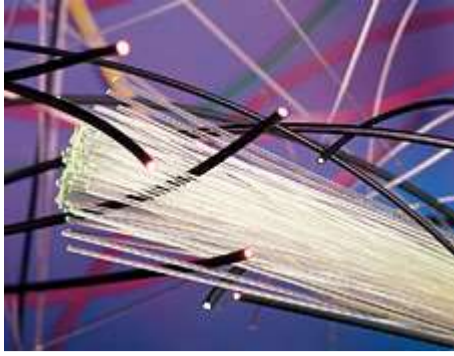


Cotton-Tipped Swab Applicators



OD 2.0 Longpass Filters

## Frequently Purchased Together



#02-534 - 1000µm, Optical Grade Plastic Optical Fiber Unjacketed  
C\$2.80

Qty

#02-540 - 265µm with 64 Fiber, Optical Grade Plastic Light Guide  
C\$5.25

Qty

#02-551 - 2000µm with 1 Fiber, Optical Grade Plastic Light Guide  
C\$7.70























Qty

#32-482 - 25.0mm Dia. x 100.0mm FL, MgF<sub>2</sub> Coated, Plano-Convex Lens  
C\$56.70

Qty

## Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	 12.5/12.7mm Optic Dia., SM05 Thin Mount, M4	Fixed		#13-789	C\$27.30 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., SM05 Thin Mount, 8-32	Fixed		#13-790	C\$27.30 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-865	C\$60.90 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., L-Slot Direct Mount	Fixed		#36-416	C\$82.60 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., Side Flange Direct Mount	Fixed		#36-418	C\$82.60 <a href="#">Request Quote</a>	11 In Stock <input type="text" value="1"/>
	 2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-668	C\$88.20 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	C\$116.20 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-850	C\$130.20 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., L-Slot and Rotation Direct Mount	Adjustable - Rotary		#36-417	C\$135.10 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., Compact Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#34-720	C\$141.40 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-529	C\$142.80 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 12.5/12.7mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-853	C\$145.60 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>
	 7.0 - 40.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-676	C\$148.40 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>

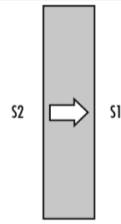
	Title	Type	Compare	Stock Number	Price	Buy
<a href="#">MORE+</a> 	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	C\$151.20 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1 
<a href="#">MORE+</a> 	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	C\$162.40 <a href="#">Request Quote</a>	20+ In Stock 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., Compact Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#34-721	C\$163.80 <a href="#">Request Quote</a>	20+ In Stock 1 
<a href="#">MORE+</a> 	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	C\$168.00 <a href="#">Request Quote</a>	20+ In Stock 1 
<a href="#">MORE+</a> 	4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-077	C\$219.80 <a href="#">Request Quote</a>	5 In Stock 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-814	C\$225.40 <a href="#">Request Quote</a>	20+ In Stock 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-817	C\$254.80 <a href="#">Request Quote</a>	20+ In Stock 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-955	C\$365.40 <a href="#">Request Quote</a>	5 In Stock 1 
<a href="#">MORE+</a> 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	C\$574.00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#84-640	C\$589.40 <a href="#">Request Quote</a>	7 In Stock 1 
<a href="#">MORE+</a> 	12.5/12.7mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-958	C\$600.60 <a href="#">Request Quote</a>	5 In Stock 1 

Check out our full selection of mounts [here](#).

## Resources

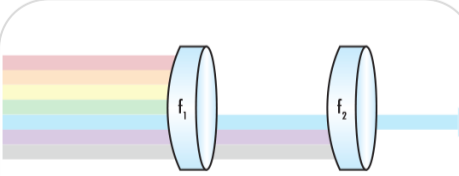
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📄 PUBLISHED ARTICLE

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? FAQ

What type of material should I look for in a filter?

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