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# SCHOTT RG-830, 50mm Dia., 3mm Thick, Colored Glass Longpass Filter

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 Stock #66-106 **20+ In Stock**

- 1 +

MRP ₹10,594

Price inclusive of all taxes

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Volume Pricing	
Qty 1-5	₹10,594 each
Qty 6-10	₹9,585 each
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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

<b>Diameter (mm):</b> 50.00	<b>Thickness (mm):</b> 3.00 ±0.2
<b>Dimensional Tolerance (mm):</b> ±0.38	<b>Bevel:</b> Protective as needed

## Optical Properties

<b>Cut-Off Position <math>\lambda_c</math> (nm):</b> 830±9	<b>Cut-On Wavelength (nm):</b> 830.00
<b>Glass/Filter Number:</b> <b>SCHOTT RG830</b>	<b>Coating:</b> Uncoated
<b>Color:</b> Black	<b>Passband Limit 1 <math>\lambda_{p1}</math> (nm):</b> 950.00
<b>Spectral Transmittance <math>t_{ip}</math> (%):</b> 97.00	<b>Stopband Limit <math>\lambda_s</math>(nm):</b> 670.00
<b>Surface Quality:</b> 80-50	<b>Wavelength:</b> IR
<b>Reflection Factor <math>P_d</math>:</b> 0.91	

## Material Properties

<b>Density (g/cm<sup>3</sup>):</b> 2.94	<b>Transformation Temperature (°C):</b> 554.00
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## Regulatory Compliance

RoHS 2015:	<b>Exempt</b>	Reach 224:	<b>Compliant</b>
Certificate of Conformance:	<b>View</b>		
Country of Origin:	United States	Imported By:	Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91- 80-6845 0000

## Product Details

- 27 Standard SCHOTT Color Glass Types
- Cut-On Wavelengths in the UV, Visible, or NIR
- Standard Circular and Square Sizes with 1, 2, or 3mm Thickness

SCHOTT Colored Glass Longpass Filters are available in 27 standard SCHOTT colored glass types, providing cut-on wavelengths in the ultra-violet (UV), visible, or near-infrared (NIR) spectra. The color glass substrates feature high spectral transmittance within their wavelength ranges. SCHOTT Colored Glass Longpass Filters are designed with standard circular and square sizes for easy integration into optical systems and have a 1, 2, or 3mm thickness. Custom sizes from 5 to 160mm are available upon request.

**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 SCHOTT's colored glass filter calculation program which can be used to calculate the internal transmittance and external transmission of each SCHOTT glass type. The program can simulate the performance of individual filters with user specified thickness or of stacked filters with varying glass types and thicknesses.

Interactive transmission curves are also available [here](#).

### Immediate Custom Quotes Available

If you have a need for any round, square, or rectangular size of a SCHOTT Colored Glass Longpass Filter in dimensions between 5mm and 50mm, please visit our [Colored Filter Glass Tool](#). We'll provide an immediate quote, and we can deliver the part to your requested size in approximately 2 weeks. A full list of standard manufacturing tolerances and restrictions are listed. To find fully customized filters that meet your requirements, visit our [Customized Optical Filter Glass Capabilities](#) page.

## 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
<a href="#">MORE+</a>	50mm Sq. VIS SCHOTT Colored Glass Longpass Filter Kit (8 Filters)		#17-015	₹50,345 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
<a href="#">MORE+</a>	50mm Sq. VIS-NIR SCHOTT Colored Glass Longpass Filter Kit (8 Filters)		#17-016	₹50,345 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
<a href="#">MORE+</a>	50/50.8mm Sq. Hoya/SCHOTT Complete Colored Glass Longpass Filter Kit (37 Filters)		#17-017	₹2,21,958 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>

**Quote Your Size**

PLEASE ENTER YOUR REQUIRED SPECIFICATIONS HERE:

Glass Type ⓘ

BG

Filter Number

Thickness (mm) ⓘ

Shape ⓘ

Diameter (mm) ⓘ

0

Length (mm) ⓘ

0

Width (mm) ⓘ

0

Quantity

0

**GET PRICING**

TYPICAL 3-4 WEEK DELIVERY. DELIVERY DATE TO BE CONFIRMED AT TIME OF ORDER.

**Standard Manufacturing Tolerances:**

<b>Edge length and diameter</b>	+/-0.2 mm
<b>Thickness</b>	For ≤ 1mm: ± 0.1mm For > 1 – 3mm: ± 0.2mm
<b>Surface Quality</b>	60 – 40
<b>Surface Accuracy</b>	≤8 Waves
<b>Parallelism</b>	≤3 arcmin
<b>Clear Aperture</b>	≥90%
<b>Edges &amp; Bevels</b>	Round parts ≥ Ø5mm: polished edges & protective bevel Square & rectangular parts < 50 x 50mm: polished edges, no bevel
<b>Edge Chips</b>	For ≤ Ø80mm: < 0.3mm (5/E0.3), for ≥ Ø81mm < 0.6mm (5/E0.6)

**Surface quality according to DIN ISO 10110:**

<b>Polishing quality</b>	P2
<b>Defects</b>	5/3 x 0.63
All edges machined	
Round filters with chamfer max. 0.5mm, square and rectangular < 50x50mm without chamfer	
Edge chips permitted up to 5/E0.3	

**General Information SCHOTT Optical Filter Glass:**

BG	Blue, blue-green, and multiband glasses
GG	Nearly colorless to yellow glasses, IR transmitting
KG	Virtually colorless glasses with high transmission in the visible and absorption in the IR
NG	Neutral density glasses with uniform attenuation in the visible range
OG	Orange glasses, IR transmitting
RG	Red and black glasses, blocking visible, IR transmitting
UG	Black and blue glasses, UV transmitting
VG	Green glasses
WG	Colorless glasses with different cut-offs in the UV, transmitting in the visible and IR ranges

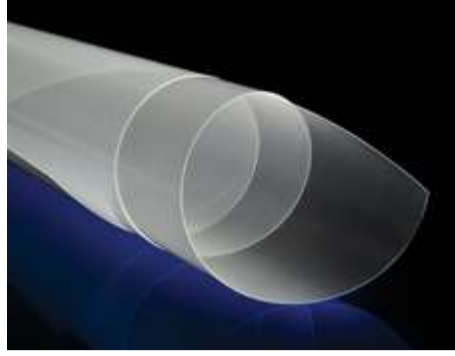
Note: The spectral curves above show the internal transmittance of the individual optical filter glasses

**ADDITIONAL CAPABILITIES**

## Frequently Purchased Together



#32-759 - SCHOTT RG-850,  
25.4mm Dia., 3mm Thick, Colored  
Glass Longpass Filter  
₹6,558



#32-807 - 6" x 6" White, IR  
Material Window  
₹3,279
























#38-331 - Edmund Machinist's 3-  
Lens Magnifier  
₹3,903



#43-794 - 1.0" x 1.0", FL 0.37", IR  
Fresnel Lens  
₹3,985

## Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
	50.0mm Optic Dia., Optic Mount	Fixed		#64-567	₹4,969 <a href="#">Request Quote</a>	4 In Stock <input type="text" value="1"/>
	50.0mm Optic Dia., Optic Mount	Fixed		#64-568	₹4,969 <a href="#">Request Quote</a>	7 In Stock <input type="text" value="1"/>
	9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#36-605	₹8,374 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., E-Series Kinematic Mount	Adjustable - Tip-Tilt		#15-867	₹9,685 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	₹10,896 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> <input type="text" value="1"/>
	19.5 - 108.0mm Optic Dia., Three-Screw Adjustable Ring Mount	Fixed		#03-670	₹11,501 <a href="#">Request Quote</a>	1 In Stock <input type="text" value="1"/>
	7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	₹11,703 <a href="#">Request Quote</a>	6 In Stock <input type="text" value="1"/>
	8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	₹12,107 <a href="#">Request Quote</a>	10 In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 <b>CLEARANCE</b>	₹12,739 <a href="#">Request Quote</a>	2 In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#58-852	₹13,621 <a href="#">Request Quote</a>	5 In Stock <input type="text" value="1"/>
	50.0/50.8mm Optic Dia., Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#58-855	₹15,840 <a href="#">Request Quote</a>	20+ In Stock <input type="text" value="1"/>

	Title	Type	Compare	Stock Number	Price	Buy
 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws	Adjustable - Tip-Tilt		#26-816	₹24,819 Request Quote	12 In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws	Adjustable - Tip-Tilt		#26-819	₹27,039 Request Quote	CONTACT US <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	₹31,074 Request Quote	1 In Stock <input type="text" value="1"/> 
 	5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp	Fixed		#16-078	₹41,365 Request Quote	CONTACT US <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	₹51,454 Request Quote	7 In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)		#62-960	₹61,039 Request Quote	20+ In Stock <input type="text" value="1"/> 
 	50.0/50.8mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt		#13-778	₹84,748 Request Quote	10 In Stock <input type="text" value="1"/> 

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

## Resources

### Media Type

- Application Note
- Video
- Published Article
- FAQ
- Glossary
- Trending in Optics

 APPLICATION NOTE

The Importance of Optical Filter Orientation...

 APPLICATION NOTE

Custom Bandpass Filter using Shortpass an...

 VIDEO

Optical Filters Review

 VIDEO

Optical Filter Coatings: Comparison of Traditional a...

 PUBLISHED ARTICLE

Selecting Color Filter Glass for Life Science Applications

 FAQ

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

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