

[All Products](#) / [Optics](#) / [SCHOTT Optical Components](#) / [SCHOTT NG Absorptive Neutral Density Filters](#)

[See all 66 Products in Family](#)

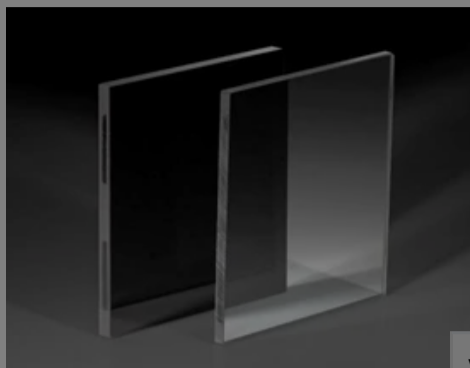
# SCHOTT NG4, 0.9

See More by [SCHOTT Optical Components](#)

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region: European Union

Submit



Stock #16-731 **3 In Stock**

1

€97<sup>.50</sup>

ADD TO CART

Volume Pricing	
Qty 1-10	€97,50 each
Qty 11-49	€85,00 each
Need More?	<a href="#">Request Quote</a>

Prices shown are exclusive of VAT/local taxes

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

## General

Type: Neutral Density Filter

## Physical & Mechanical Properties

Dimensions (mm): 50.0 x 50.0

Length (mm): 50.00

Thickness (mm): 1.70 (nominal)

Width (mm): 50.00

Dimensional Tolerance (mm): ±0.38

## Optical Properties

Optical Density OD (Average): 0.9 ±0.03 @ 546nm

Glass/Filter Number: **SCHOTT NG4**

Coating: Uncoated

Index of Refraction (n<sub>d</sub>): 1.51

Surface Quality: 80-50

Transmission (%): 12.59 ±0.76% @ 546nm

Wavelength Range (nm): 400 - 700

## Material Properties

Transformation Temperature (°C): 483

## Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

## Product Details

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

**Select Your Country/Region:**

- Tightly Controlled Transmission Specifications
- NG4, NG9, or NG11 Glass Types
- Specified Optical Densities from 0.15 to 5.0
- Provide Even Light Attenuation in the Visible Spectrum
- **SCHOTT NG Gray Glass** Also Available

SCHOTT NG Absorptive Neutral Density (ND) Filters consist of NG4, NG9, or NG11 SCHOTT glass types and provide even light attenuation through absorption in the visible spectrum. These filters are manufactured to achieve a specified optical density, ranging from 0.15 to 5.0, to simplify integration into optical systems. SCHOTT NG Absorptive Neutral Density (ND) Filters are available in a standard 50 x 50mm size and multiple filters can be stacked to achieve custom optical densities. Custom sizes from 5 to 160mm as well as custom optical densities or transmission values for specific wavelengths are available on request; for more information, visit our [Colored Glass Filter Manufacturing](#) capabilities webpage. [SCHOTT NG Gray Glass Filters](#) are also available.

Each filter lot is measured and thickness is adjusted to meet the specified transmission value at 546nm. Variations in filter lot performance can result in variations in nominal thickness; however, the transmission variations between lots will be minimal.

### 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.

## 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>	12.5mm Dia., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-094	€277,00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	25mm Dia., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-095	€510,00 <a href="#">Request Quote</a>	<a href="#">CONTACT US</a> 1
<a href="#">MORE+</a>	50mm Sq., SCHOTT NG Absorptive ND Filter Kit (14 Filters)		#15-096	€1.095,00 <a href="#">Request Quote</a>	1 In Stock 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)

### 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

0

Quantity

0

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

GET PRICING

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region:

TYPICAL 3-4 WEEK DELIVERY. DELIVERY 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	

Frequently Purchased Together



#43-815 - 1.0 OD 50mm Square, Reflective ND Filter €79,95

Qty



#46-123 - 1.3 OD 50mm Square, Reflective ND Filter €79,95

Qty



#14-076 - SCHOTT NG1, 50mm Sq., 2mm Thick, Absorptive ND Filter €98,50















Qty



#14-078 - SCHOTT NG1, 50mm Sq., 3mm Thick, Absorptive ND Filter €98,50

Qty

## Compatible Mounts

	Title				Buy
	Spring Mount Filter Holder Metric				5 In Stock <input type="text" value="1"/> 
	40mm Sq., Fixed Filter Holder	Fixed	#54-997	€93,50 Request Quote	16 In Stock <input type="text" value="1"/> 
	Filter Kinematic Mount, 2-Screw	Adjustable - Tip-Tilt	#58-874	€122,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
	60mm sq - Rectangular Bar Clamp	Fixed	#54-995	€126,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
	Filter Kinematic Mount, 3-Screw	Adjustable - Tip-Tilt	#58-875	€138,00 Request Quote	17 In Stock <input type="text" value="1"/> 
	50/50.8mm Sq. Kinematic Mount, 2 Screws	Adjustable - Tip-Tilt	#58-858	€143,00 Request Quote	20+ In Stock <input type="text" value="1"/> 
	50/50.8mm Sq. Kinematic Mount, 3 Screws	Adjustable - Tip-Tilt	#58-861	€157,00 Request Quote	20+ In Stock <input type="text" value="1"/> 

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

**Select Your Country/Region:**

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

## 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](#)

Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

**Select Your Country/Region:**