

[All Products](#) / [Optics](#) / [Optical Filters](#) / [Additive and Subtractive Dichroic](#)

[See all 38 Products in Family](#)

50mm Diameter



Additive and Subtractive Dichroic Color Filters

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

1

€44^{,75}

ADD TO CART

Volume Pricing	
Qty 1-24	€44,75 each
Qty 25-49	€40,50 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: Dichroic Filter

Physical & Mechanical Properties

Diameter (mm): 50.00

Thickness (mm): 2.00 Nominal

Dimensional Tolerance (mm): ±0.25

Clear Aperture (%): ≥85

Optical Properties

Angle of Incidence (°): 0

Cut-Off Wavelength (nm): 485.00

Cut-On Wavelength (nm): 615.00

Substrate: [BOROFLOAT®](#)

Coating: Subtractive Color

Color: Magenta

Surface Quality: 80-50

Cut-On Wavelength Tolerance (µm): 0.015

Coating Specification: $T_{avg} >80\%$ @ 380 - 470nm
 $T_{avg} <1\%$ @ 535 - 565nm
 $T_{avg} >80\%$ @ 655 - 750nm

Cut-Off Wavelength Tolerance (µm): 0.015

Environmental & Durability Factors

Operating Temperature (°C): <100

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Reach 247: **Compliant**

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:

Need different specs or measurements?

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

- High Saturation Dichroic Type
- Matrix of Sizes and Sets
- Precision Glass Substrate

Additive and Subtractive Dichroic Color Filters are dichroic filters ideal for machine vision and commonly used for color separation and contrast enhancement applications. Provided in unmounted versions, these filters are easily integrated into a variety of existing camera and illumination setups. In addition, dichroic filters provide wider fields of view not obtainable using narrow bandpass interference filters. Additive and Subtractive Dichroic Color Filters feature a precision glass substrate and are offered in a variety of sizes and sets. A complete set of these dichroic filters is available in a [Pre-Loaded filter wheel](#).

Typical applications include photo enlargers, beam separation, and placing filters in front of an imaging lens to selectively isolate spectral regions/colors.

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+	Red, Green & Blue, 12.5mm Diameter, Dichroic Filter Set		#52-545	€68,00 Volume Pricing Request Quote	8 In Stock <input type="text" value="1"/>
MORE+	Cyan, Magenta & Yellow, 12.5mm Diameter, Dichroic Filter Set		#52-548	€68,00 Volume Pricing Request Quote	CONTACT US <input type="text" value="1"/>
MORE+	Red, Green & Blue, 25mm Diameter, Dichroic Filter Set		#52-546	€81,50 Request Quote	1 In Stock <input type="text" value="1"/>
MORE+	Cyan, Magenta & Yellow, 25mm Diameter, Dichroic Filter Set		#52-549	€81,50 Volume Pricing Request Quote	1 In Stock <input type="text" value="1"/>
MORE+	Cyan, Magenta & Yellow, 50mm Diameter, Dichroic Filter Set		#52-550	€115,00 Volume Pricing Request Quote	9 In Stock <input type="text" value="1"/>
MORE+	Red, Green & Blue, 50mm Diameter, Dichroic Filter Set		#52-547	€115,00 Request Quote	1 In Stock <input type="text" value="1"/>
MORE+	Red, Green & Blue, 50mm Square, Dichroic Filter Set		#46-140	€115,00 Request Quote	CONTACT US <input type="text" value="1"/>

	Title	Compare	Stock Number	Price	Buy
--	-------	---------	--------------	-------	-----

MORE+

Cyan, Magenta & Yellow - 50mm
Square, Dichroic F

€115,00

2 In Stock

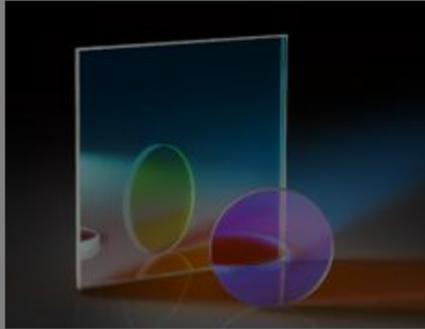
1



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

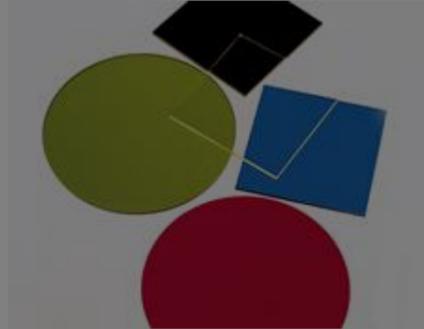
Select Your Country/Region:

Frequently Purchased Together



#52-529 - 50mm Diameter, Red
Dichroic Filter
€44,75

Qty



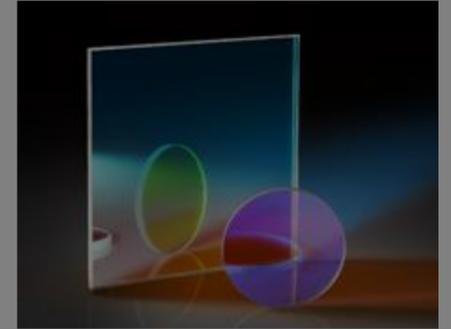
#43-937 - 2" Dia. Blue Optical Cast
Plastic Filter
€22,75

Qty



#47-217 - 50mm Dia.
High Performance Glass
Linear Polarizer
€258,00

Qty



#52-528 - 25mm Diameter, Red
Dichroic Filter
€29,00

Qty



Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+	 50.0mm Optic Dia., Optic Mount	Fixed		#64-567	€49,25 Request Quote	2 In Stock 1
MORE+	 50.0mm Optic Dia., Optic Mount	Fixed		#64-568	€49,25 Request Quote	8 In Stock 1
MORE+	 10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder	Fixed		#55-530	€108,00 Request Quote	CONTACT US 1
MORE+	 7.0 - 67.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-669	€116,00 Request Quote	20+ In Stock 1
MORE+	 50.0/50.8mm Optic Dia., Optical Cell Assembly	Fixed		#36-465 CLEARANCE	€119,95 Request Quote	2 In Stock 1
MORE+	 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder	Fixed		#03-666	€120,00 Request Quote	20+ In Stock 1
MORE+	 50.0/50.8mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)		#62-957	€308,00 Request Quote	3 In Stock 1
MORE+	 5.0 - 100.0mm Optic Dia., Self- Centering Jaw Clamp	Fixed		#16-078	€410,00 Request Quote	CONTACT US 1
MORE+	 50.0/50.8mm Optic Dia., Precision Gimbal Mount	Adjustable - Gimbal		#55-000	€510,00 Request Quote	7 In Stock 1

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	50.0/50.8mm Optic Dia., X Translating Mount				€605,00	20+ In Stock <input type="text" value="1"/> 
MORE+ 	50.0/50.8m Optic Dia., Optical Mou					10 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
- 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?

[View More](#)