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/ [VIS-NIR Coated Double-Concave](#)

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TECHSPEC®

9mm Dia. x -12mm

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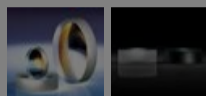


Stock #48-942 **9 In Stock** [Other Coating Options](#)

1

€47^{,50}

ADD TO CART



Volume Pricing

Qty 1-9 €47,50 each

Qty 10-25 €42,50 each

Qty 26-49 €38,00 each

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Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:stp
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet
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General

Type: Double-Concave Lens

Physical & Mechanical Properties

Diameter (mm): 9.00 +0.0/-0.025

Bevel: Protective as needed

Center Thickness CT (mm): 1.50

Center Thickness Tolerance (mm): ±0.05

Centering (arcmin): <1

Clear Aperture CA (mm): 8.1

Edge Thickness ET (mm): 2.43

Optical Properties

Effective Focal Length EFL (mm): -12.00

Substrate: [N-SF11](#)

f/#: 1.33

Numerical Aperture NA: 0.38

Coating: VIS-NIR (400-1000nm)

Wavelength Range (nm): 400 - 1000

Back Focal Length BFL (mm): -12.41

Coating Specification: R_{abs} ≤ 0.25% @ 880nm
R_{avg} ≤ 1.25% @ 400 - 870nm
R_{avg} ≤ 1.25% @ 890 - 1000nm

Focal Length Specification Wavelength (nm):	587.6	Focal Length Tolerance (%):	±1
Radius R₁=-R₂ (mm):	-19.16	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.</p> <p>Select Your Country/Region:</p> </div>	
Damage Threshold, By Design: ⓘ	5 J/cm ² @ 532nm, 10ns		
Irregularity (P-V) @ 632.8nm:	λ/4		

Regulatory Compliance

RoHS 2015:	Compliant	Certificate of Conformance:	View
Reach 235:	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

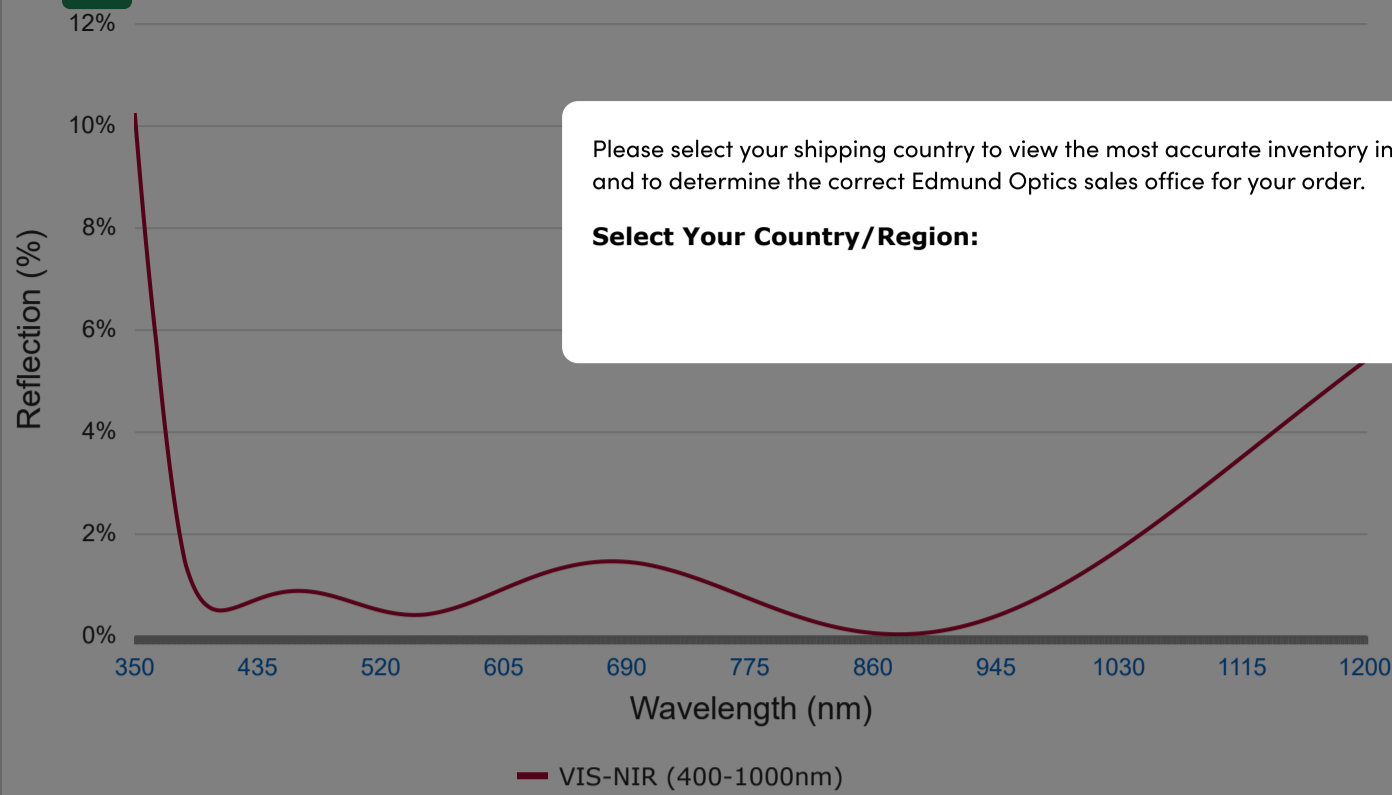
- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: **Uncoated**, **VIS-EXT**, **MgF₂**, **VIS 0°**, **NIR I**, and **NIR II**

TECHSPEC® VIS-NIR Coated Double-Concave (DCV) Lenses are designed to have two inward curved surfaces and a negative focal length similar to Plano-Concave (PCV) lenses. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Double-Concave (DCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® VIS-NIR Coated Double-Concave (DCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available **Uncoated**, **VIS-EXT**, **MgF₂**, **VIS 0°**, **NIR I**, or with **NIR II** AR coating options.

Technical Information

Coating Curves

VIS-NIR (400-1000nm)



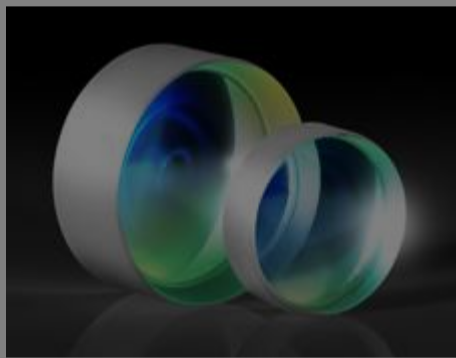
Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region:

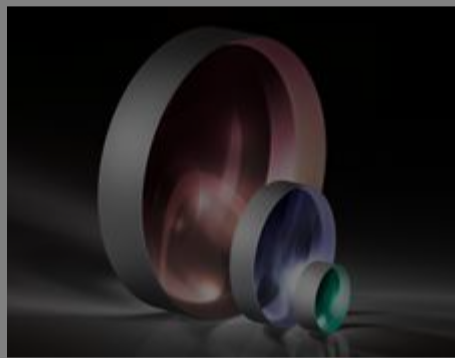
🔍 SHIFT + SELECT an area on CURVE to zoom

Please note that coating performance outside each product's specified design range is theoretical and may vary.

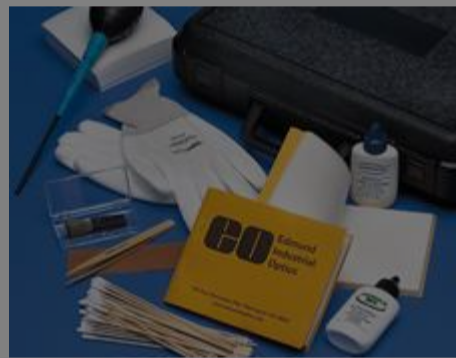
Related Products



Double-Concave (DCV) Lenses



VIS-NIR Coated Plano-Concave (PCV) Lenses









Optical Cleaning



Benchtop Optical Mounts

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	9.0mm Optic Dia., Optic Mount	Fixed		#64-553	€32,75 Request Quote	8 In Stock <input type="text" value="1"/> 
MORE+ 	9mm Inner Single Optic Mount	Fixed		#38-747	€41,00 Request Quote	5 In Stock <input type="text" value="1"/> 
MORE+ 	25mm Cage 9mm Diameter Lens Mount	Fixed		#85-552	€45,75 Request Quote	3 In Stock <input type="text" value="1"/> 

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APPLICATION NOTE

Anti-Reflection

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APPLICATION NOTE

Understanding
Optical
Specifications

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APPLICATION NOTE

Lens Geometry
Performance
Comparison

GLOSSARY

NIR (Near
Infrared)

GLOSSARY

VIS/NIR
Coating

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