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**TECHSPEC® 12mm Dia. x -18mm FL, NIR I Coated, Double-Concave Lens**



Stock **#49-547** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ €47.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-9	€47,00 each
Qty 10-25	€42,00 each
Qty 26-49	€37,75 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Double-Concave Lens **Type:**

**Physical & Mechanical Properties**

12.00 +0.0/-0.025	<b>Diameter (mm):</b>
Protective as needed	<b>Bevel:</b>
2.00	<b>Center Thickness CT (mm):</b>
±0.05	<b>Center Thickness Tolerance (mm):</b>
<1	<b>Centering (arcmin):</b>
11.00	<b>Clear Aperture CA (mm):</b>
3.76	<b>Edge Thickness ET (mm):</b>
<b>Optical Properties</b>	
-18.00	<b>Effective Focal Length EFL (mm):</b>
<a href="#">N-BK7</a>	<b>Substrate:</b> <input type="checkbox"/>
1.5	<b>f#:</b>
0.33	<b>Numerical Aperture NA:</b>
NIR I (600-1050nm)	<b>Coating:</b>
600 - 1050	<b>Wavelength Range (nm):</b>
-18.65	<b>Back Focal Length BFL (mm):</b>
$R_{avg} \leq 0.5\% @ 600 - 1050nm$	<b>Coating Specification:</b>
587.6	<b>Focal Length Specification Wavelength (nm):</b>
±1	<b>Focal Length Tolerance (%):</b>
-18.94	<b>Radius <math>R_1=R_2</math> (mm):</b>
40-20	<b>Surface Quality:</b>
$7 J/cm^2 @ 1064nm, 10ns$	<b>Damage Threshold, By Design:</b> <input type="checkbox"/>
1.5λ	<b>Power (P-V) @ 632.8nm:</b>
λ/4	<b>Irregularity (P-V) @ 632.8nm:</b>

<b>Regulatory Compliance</b>	
<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>
<a href="#">Compliant</a>	<b>Reach 235:</b>

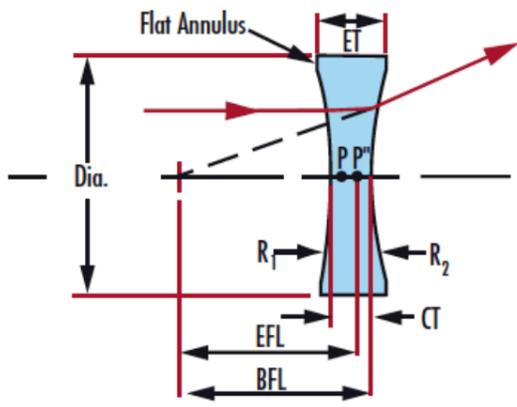
## Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 600 - 1050nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), and [NIR II](#)

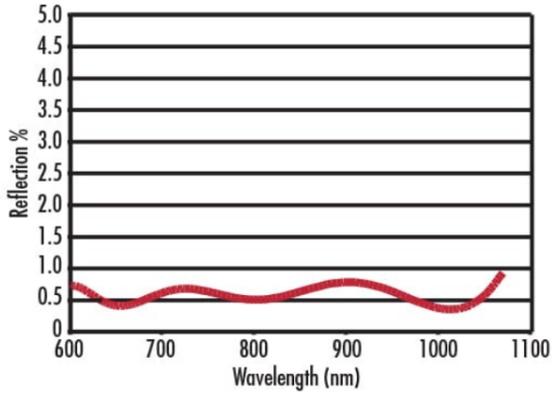
TECHSPEC® NIR I Coated Double-Concave (DCV) Lenses are designed to have two inward curved surfaces and a negative focal length similar to Plano-Concave (PCV) lenses. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Double-Concave (DCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes.

TECHSPEC® NIR I Coated Double-Concave (DCV) Lenses offer optimal performance in the 600nm to 1050nm range. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), or with [NIR II](#) AR coating options.

## Technical Information



**NIR I Coating**  
 $R_{avg} \leq 0.5\% @ 600 - 1050nm$   
 Typ. Energy Density Limit:  $7 J/cm^2 @ 1064nm, 10ns$



## Custom

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](#).

## Compatible Mounts