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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
Need More?	<a href="#">Request Quote</a>

ⓘ 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>
<b>N-BK7</b>	<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>	
<b>Compliant</b>	<b>RoHS 2015:</b>
<b>View</b>	<b>Certificate of Conformance:</b>
<b>Compliant</b>	<b>Reach 235:</b>

## 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 <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.

## Technical Information



## Compatible Mounts