

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



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

☐ [Other Coating Options](#)

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1

+

C\$65^{.80}

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Volume Pricing	
Qty 1-9	C\$65.80 each
Qty 10-25	C\$58.80 each
Qty 26-49	C\$52.85 each
Need More?	Request Quote

Product Downloads

General

Type:
Double-Concave Lens

Physical & Mechanical Properties

Diameter (mm):
12.00 +0.0/-0.025

	Bevel:
Protective as needed	
Center Thickness CT (mm):	2.00
Center Thickness Tolerance (mm):	±0.05
Centering (arcmin):	<1
Clear Aperture CA (mm):	11.00
Edge Thickness ET (mm):	3.76

Optical Properties

Effective Focal Length EFL (mm):	-18.00
Substrate: ☐	N-BK7
f#:	1.5
Numerical Aperture NA:	0.33
Coating:	NIR I (600-1050nm)
Wavelength Range (nm):	600 - 1050
Back Focal Length BFL (mm):	-18.65
Coating Specification:	R _{avg} ≤0.5% @ 600 - 1050nm
Focal Length Specification Wavelength (nm):	587.6
Focal Length Tolerance (%):	±1
Radius R ₁ =R ₂ (mm):	-18.94
Surface Quality:	40-20
Damage Threshold, By Design: ☐	7 J/cm ² @ 1064nm, 10ns
Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4

Regulatory Compliance

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

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](#), [MgF₂](#), [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](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information



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
