

[See all 26 Products in Family](#)

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



Stock **#49-547-INK** [CONTACT US](#)

☐ [Other Coating Options](#)

-

1

+

£46⁴⁰

ADD TO CART

Volume Pricing	
Qty 1-9	£46.40 each
Qty 10-25	£41.60 each
Qty 26-49	£37.20 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Double-Concave Lens

Physical & Mechanical Properties

12.00 ±0.025	Diameter (mm):
Protective as needed	Bevel:
2.00	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
11.00	Clear Aperture CA (mm):
3.76	Edge Thickness ET (mm):
Optical Properties	
-18.00	Effective Focal Length EFL (mm):
N-BK7	Substrate: ☐
1.5	f#:
0.33	Numerical Aperture NA:
NIR I (600-1050nm)	Coating:
600 - 1050	Wavelength Range (nm):
-18.65	Back Focal Length BFL (mm):
R _{avg} ≤0.5% @ 600 - 1050nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-18.94	Radius R ₁ =R ₂ (mm):
40-20	Surface Quality:
7 J/cm² @ 1064nm, 10ns	Damage Threshold, By Design: ☐
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
Regulatory Compliance	
View	Certificate of Conformance:

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

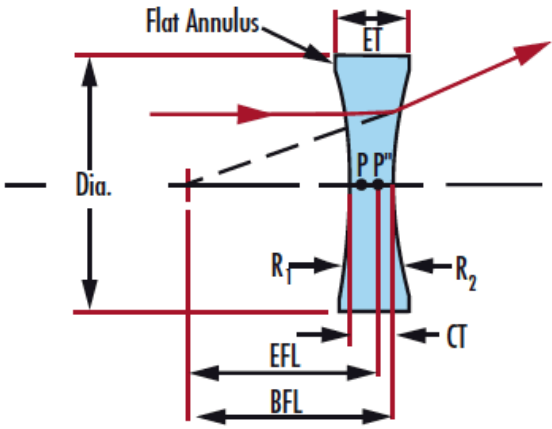
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

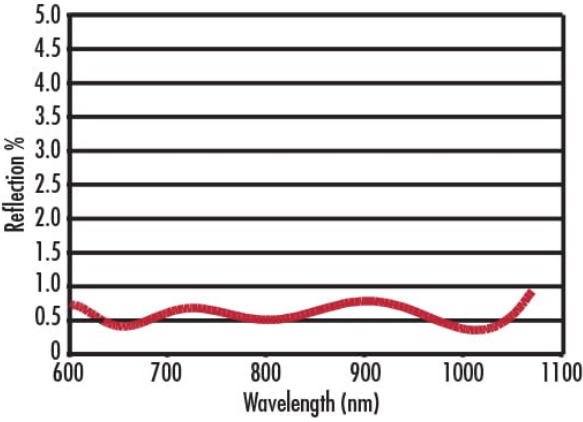
- AR Coated to Provide <0.5% Reflectance per Surface for 600 - 1050nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), and [NIR II](#)

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



NIR I Coating
R_{avg} ≤ 0.5% @ 600 - 1050nm
Typ. Energy Density Limit: 7 J/cm² @ 1064nm, 10ns



Compatible Mounts