

[See all 26 Products in Family](#)

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



Stock **#68-012** **3 In Stock**

[Other Coating Options](#)

1  MRP ₹4,742

**i** Price inclusive of all taxes

**ADD TO CART**

Volume Pricing	
Qty 1-9	₹4,742 each
Qty 10-25	₹4,237 each
Qty 26-49	₹3,809 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

Double-Concave Lens **Type:**

**Physical & Mechanical Properties**

**Diameter (mm):**

12.00 +0.0/-0.025

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 II (750-1550nm)

Wavelength Range (nm):

750 - 1550

Back Focal Length BFL (mm):

-18.65

Coating Specification:

$R_{\text{abs}} \leq 1.5\% @ 750 - 800\text{nm}$   
 $R_{\text{abs}} \leq 1.0\% @ 800 - 1550\text{nm}$   
 $R_{\text{avg}} \leq 0.7\% @ 750 - 1550\text{nm}$

Focal Length Specification Wavelength (nm):

587.6

Focal Length Tolerance (%):

±1.00

Radius  $R_1=R_2$  (mm):

-18.94

Surface Quality:

40-20

Damage Threshold, Reference:

8 J/cm<sup>2</sup> @ 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

Country of Origin:

Japan

Imported By:

Edmund Optics India Private Limited  
267, Greystone Building, Second Floor,  
6th Cross Rd, Binnamangala,  
Stage 1, Indiranagar, Bengaluru,  
Karnataka, India 560038  
Phone: +91- 80-6845 0000

## 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

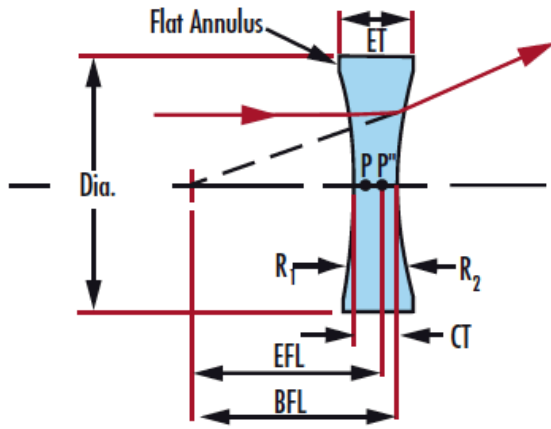
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- AR Coated to Provide <0.7% Reflectance per Surface for 750 - 1550nm
- Double-Concave Lenses Have Two Inward Curved Surfaces and a Negative Focal Length
- Used for Image Reduction and to Spread Light
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), and [NIR I](#)

TECHSPEC® NIR II 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 II Coated Double-Concave (DCV) Lenses offer optimal performance in the 750nm to 1550nm range. These lenses are also available in [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), or with [NIR I](#) AR coating options.

## Technical Information



## Compatible Mounts