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TECHSPEC<sup>®</sup> 9mm Dia. x -12mm FL, VIS-NIR Coated, Double-Concave Lens



Stock **#48-942** **9 In Stock**

☐ [Other Coating Options](#)

-

1

+

C\$66<sup>.50</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | C\$66.50 each                 |
| Qty 10-25      | C\$59.50 each                 |
| Qty 26-49      | C\$53.20 each                 |
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Product Downloads

General

Type:  
Double-Concave Lens

Physical & Mechanical Properties

Diameter (mm):  
9.00 +0.0/-0.025

|                                             |                                                                                                                    |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Protective as needed                        | Bevel:                                                                                                             |
| Center Thickness CT (mm):                   | 1.50                                                                                                               |
| Center Thickness Tolerance (mm):            | ±0.05                                                                                                              |
| Centering (arcmin):                         | <1                                                                                                                 |
| Clear Aperture CA (mm):                     | 8.1                                                                                                                |
| Edge Thickness ET (mm):                     | 2.43                                                                                                               |
| Optical Properties                          |                                                                                                                    |
| Effective Focal Length EFL (mm):            | -12.00                                                                                                             |
| Substrate: □                                | N-SF11                                                                                                             |
| f/#:                                        | 1.33                                                                                                               |
| Numerical Aperture NA:                      | 0.38                                                                                                               |
| Coating:                                    | VIS-NIR (400-1000nm)                                                                                               |
| Wavelength Range (nm):                      | 400 - 1000                                                                                                         |
| Back Focal Length BFL (mm):                 | -12.41                                                                                                             |
| Coating Specification:                      | R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm |
| Focal Length Specification Wavelength (nm): | 587.6                                                                                                              |
| Focal Length Tolerance (%):                 | ±1                                                                                                                 |
| Radius R <sub>1</sub> =R <sub>2</sub> (mm): | -19.16                                                                                                             |
| Surface Quality:                            | 40-20                                                                                                              |
| Damage Threshold, By Design: □              | 5 J/cm² @ 532nm, 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                                                                                                          |

## 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

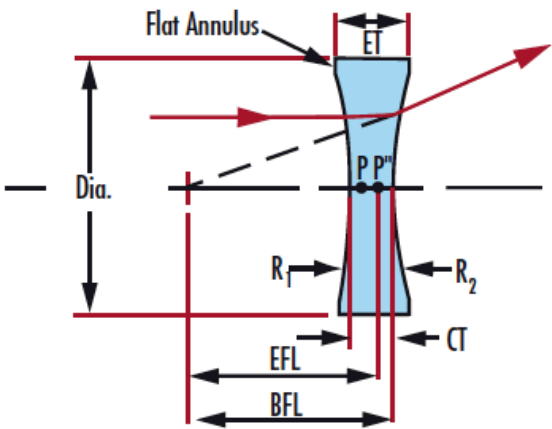
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [NIR I](#), and [NIR II](#)

TECHSPEC® VIS-NIR 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

Technical Information



Coating Curves

Compatible Mounts