

**TECHSPEC® 9mm Dia. x -9mm FL, VIS-NIR Coated, Double-Concave Lens**



Stock **#48-348** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ £38<sup>00</sup>

**ADD TO CART**

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | £38.00 each                   |
| Qty 10-25      | £34.00 each                   |
| Qty 26-49      | £30.40 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**

|                      |   |
|----------------------|---|
| 9.00 +0.0/-0.025     | <b>Diameter (mm):</b>                   |
| Protective as needed | <b>Bevel:</b>                           |
| 2.25                 | <b>Center Thickness CT (mm):</b>        |
| ±0.05                | <b>Center Thickness Tolerance (mm):</b> |
| <3                   | <b>Centering (arcmin):</b>              |
| 8.1                  | <b>Clear Aperture CA (mm):</b>          |
| 3.48                 | <b>Edge Thickness ET (mm):</b>          |

## Optical Properties

|   |  |
|---|--|
| -9.00   | <b>Effective Focal Length EFL (mm):</b>                      |
| <b>N-SF11</b>   | <b>Substrate:</b> <input type="checkbox"/>                   |
| 1.00  | <b>f#:</b>   |
| 0.50  | <b>Numerical Aperture NA:</b>                                |
| VIS-NIR (400-1000nm)  | <b>Coating:</b>  |
| 400 - 1000  | <b>Wavelength Range (nm):</b>                                |
| -9.61   | <b>Back Focal Length BFL (mm):</b>                           |
| <b>Coating Specification:</b><br>$R_{abs} \leq 0.25\% @ 880nm$<br>$R_{avg} \leq 1.25\% @ 400 - 870nm$<br>$R_{avg} \leq 1.25\% @ 890 - 1000nm$ |  |
| 587.6   | <b>Focal Length Specification Wavelength (nm):</b>           |
| ±1  | <b>Focal Length Tolerance (%):</b>                           |
| -14.60  | <b>Radius <math>R_1=R_2</math> (mm):</b>                     |
| 40-20   | <b>Surface Quality:</b>                                      |
| 5 J/cm <sup>2</sup> @ 532nm, 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>                         |

## Regulatory Compliance

|                  |                                    |
|------------------|------------------------------------|
| <b>Compliant</b> | <b>RoHS 2015:</b>                  |
| <b>View</b>      | <b>Certificate of Conformance:</b> |
| <b>Compliant</b> | <b>Reach 235:</b>                  |

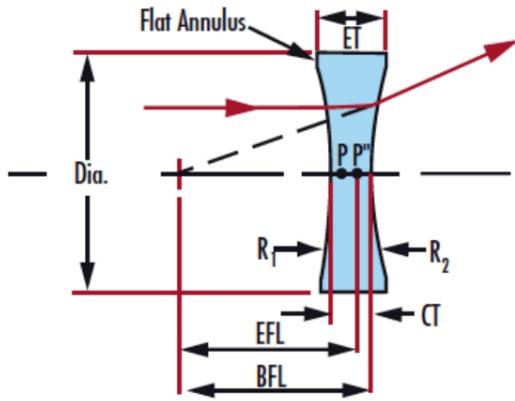
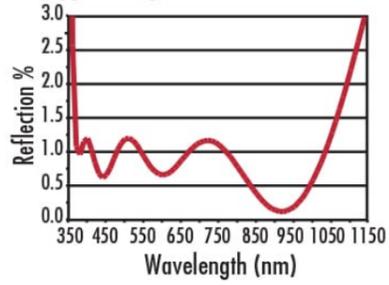
## Product Details

- 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 telescopes. TECHSPEC® VIS-NIR Coated Double-Concave (DCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [NIR I](#), or with [NIR II](#) AR coating options.

## Technical Information

**VIS-NIR Coating**  
 $R_{avg} \leq 0.25\%$  @ 880nm,  $R_{avg} \leq 1.25\%$  @ 400 - 1000nm  
 Typ. Energy Density Limit: 5 J/cm<sup>2</sup> @ 532nm, 10ns



## Coating Curves

### 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