

[See all 13 Products in Family](#)

TECHSPEC® 12mm Dia. x -24mm FL, MgF₂ Coated, Double-Concave Lens



Stock #48-689 **11 In Stock**

[Other Coating Options](#)

1 £33²⁰

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-9 | £33.20 each |
| Qty 10-25 | £29.80 each |
| Qty 26-49 | £26.60 each |
| Need More? | Request Quote |

! Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Double-Concave Lens **Type:**

Physical & Mechanical Properties

| | |
|----------------------|---|
| 12.00 +0.0/-0.025 | Diameter (mm): |
| Protective as needed | Bevel: |
| 2.00 | Center Thickness CT (mm): |
| ±0.05 | Center Thickness Tolerance (mm): |
| <1 | Centering (arcmin): |
| 11.0 | Clear Aperture CA (mm): |
| 3.31 | Edge Thickness ET (mm): |

Optical Properties

| | |
|--|--|
| -24.00 | Effective Focal Length EFL (mm): |
| N-BK7 | Substrate: <input type="checkbox"/> |
| 2.00 | f#: |
| 0.25 | Numerical Aperture NA: |
| MgF ₂ (400-700nm) | Coating: |
| 400 - 700 | Wavelength Range (nm): |
| -24.65 | Back Focal Length BFL (mm): |
| R _{avg} ≤ 1.75% @ 400 - 700nm | Coating Specification: |
| 587.6 | Focal Length Specification Wavelength (nm): |
| ±1 | Focal Length Tolerance (%): |
| -25.14 | Radius R₁=R₂ (mm): |
| 40-20 | Surface Quality: |
| 10 J/cm ² @ 532nm, 10ns | Damage Threshold, By Design: <input type="checkbox"/> |
| 1.5λ | Power (P-V) @ 632.8nm: |
| λ/4 | Irregularity (P-V) @ 632.8nm: |

Regulatory Compliance

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

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

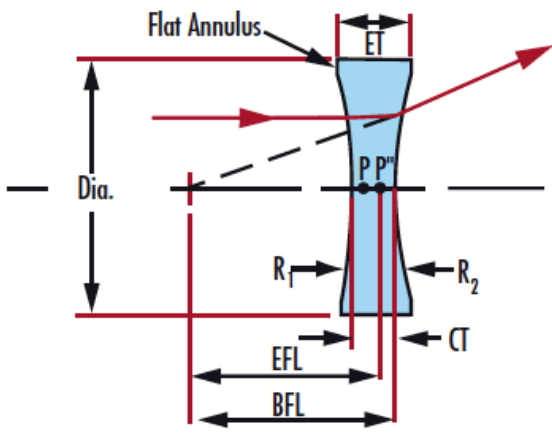
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® MgF₂ 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.

Technical Information



Coating Curves

Compatible Mounts