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TECHSPEC® 12mm Dia. x -18mm FL, MgF₂ Coated, Double-Concave Lens



Stock **#48-937** **20+ In Stock**

[Other Coating Options](#)

1 MRP ₹4,187

Price inclusive of all taxes

ADD TO CART

Volume Pricing	
Qty 1-9	₹4,187 each
Qty 10-25	₹3,758 each
Qty 26-49	₹3,355 each
Need More?	Request Quote

Product Downloads

General

Double-Concave Lens **Type:**

Physical & Mechanical Properties

Diameter (mm):

12.00 +0.0/-0.025

Bevel:

Protective as needed

Center Thickness CT (mm):

2.00

Center Thickness Tolerance (mm):

±0.05

Centering (arcmin):

<1

Clear Aperture CA (mm):

11.0

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:

MgF₂ (400-700nm)

Wavelength Range (nm):

400 - 700

Back Focal Length BFL (mm):

-18.65

Coating Specification:

R_{avg} ≤ 1.75% @ 400 - 700nm

Focal Length Specification Wavelength (nm):

587.6

Focal Length Tolerance (%):

±1

Radius R₁=R₂ (mm):

-18.94

Surface Quality:

40-20

Damage Threshold, By Design:

10 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

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

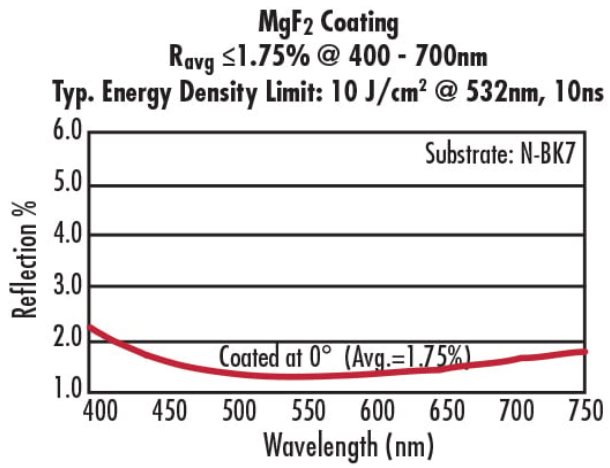
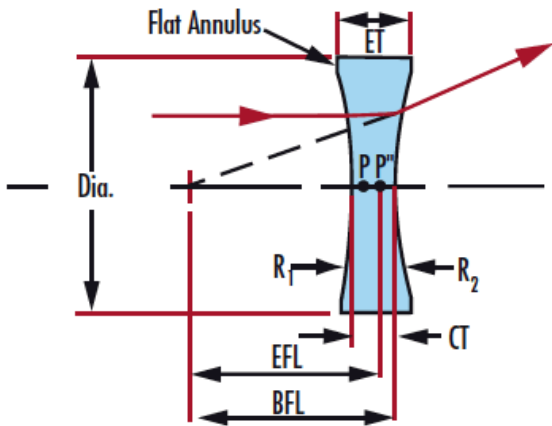
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- AR Coated to Provide $<1.75\%$ Reflectance per Surface for 400 - 700nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [VIS \$0^\circ\$](#) , [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. TECHSPEC® MgF₂ Coated Double-Concave (DCV) Lenses are ideal for broadband applications. These lenses are also available in [Uncoated](#), [VIS-EXT](#), [VIS \$0^\circ\$](#) , [VIS-NIR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information



Coating Curves

Compatible Mounts