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TECHSPEC® 9mm Dia. x -18mm FL, NIR II Coated, Double-Concave Lens



Stock **#68-010** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ £35⁰⁰

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Volume Pricing	
Qty 1-9	£35.80 each
Qty 10-25	£32.00 each
Qty 26-49	£28.60 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Double-Concave Lens **Type:**

Physical & Mechanical Properties

Diameter (mm):
9.00 +0.0/-0.025

Center Thickness CT (mm):
1.50

Center Thickness Tolerance (mm):
±0.05

Centering (arcmin):
<1

Clear Aperture CA (mm):
8.10

Edge Thickness ET (mm):
2.45

Optical Properties

Effective Focal Length EFL (mm):
-18.00

Substrate:
N-BK7

f#:
2.00

Numerical Aperture NA:
0.25

Coating:
NIR II (750-1550nm)

Wavelength Range (nm):
750 - 1550

Back Focal Length BFL (mm):
-18.49

Coating Specification:
R_{abs} ≤1.5% @ 750 - 800nm
R_{abs} ≤1.0% @ 800 - 1550nm
R_{avg} ≤0.7% @ 750 - 1550nm

Focal Length Specification Wavelength (nm):
587.6

Focal Length Tolerance (%):
±1.00

Radius R₁=R₂ (mm):
-18.86

Surface Quality:
40-20

Damage Threshold, Reference:
8 J/cm² @ 1064nm, 10ns

Power (P-V) @ 632.8nm:
1.5λ

Irregularity (P-V) @ 632.8nm:
λ/4

Regulatory Compliance

RoHS 2015:
Compliant

Reach 219:
Compliant

Certificate of Conformance:
[View](#)

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](#), [MgF₂](#), [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.

Technical Information



Compatible Mounts
