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TECHSPEC® 50mm Dia x 40mm FL, NIR I Coated, Molded Aspheric Condenser Lens



TECHSPEC Molded Aspheric Condenser Lenses

Stock **#15-735** **6 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ £55²⁰

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Volume Pricing	
Qty 1-10	£55.20 each
Qty 11-49	£48.80 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Condenser Lens **Type:**

Note:
[Click here](#) for more information on the ISO 10110 surface quality specification.

Physical & Mechanical Properties

Diameter (mm):

50.00 +0.0/-0.3

Centering (arcmin):
≤25

Clear Aperture CA (mm):
44.78

Edge Thickness ET (mm):
3.21

Center Thickness CT (mm):
21.42 ±0.30

Bevel:
Protective as needed

Diameter of Asphere (mm):
50.00

Shape of Back Surface:
Plano

Optical Properties

Effective Focal Length EFL (mm):
40.00 @587.6nm

Numerical Aperture NA:
0.62

Back Focal Length BFL (mm):
25.92

Substrate:
[Liba2000+](#)

Focal Length Tolerance (%):
±5

Coating:
NIR I (600-1050nm)

Coating Specification:
 $R_{avg} \leq 0.5\%$ @ 600 - 1050nm

Surface Quality:
Molded Side: 5/5 x 0.63; E 0.4
Polished Side: 5/5 x 0.25; E 0.4

f#:
0.8

Abbe Number (v_d):
58.9

Design Wavelength DWL (nm):
587.6

Index of Refraction (n_d):
1.52

Radius R_2 (mm):
∞

Wavelength Range (nm):
600 - 1050

Conjugate Distance:
Infinite

Focal Length Specification Wavelength (nm):
587.6

Material Properties

Coefficient of Thermal Expansion CTE ($10^{-6}/^{\circ}\text{C}$):
9.4

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Certificate of Conformance:
[View](#)

Reach 235:
[Compliant](#)

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

- High Numerical Apertures
- Fully Documented for OEM Integration
- Ideal for Illumination Applications

TECHSPEC® Molded Aspheric Condenser Lenses have been designed for integration into the illumination path of OEM instrumentation. Available in 5 to 50mm diameters, the small diameter lenses are ideal for medical devices or portable instruments, while the larger lenses are typically integrated into benchtop analytical equipment including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms. The front aspheric surface is molded to eliminate spherical aberrations, while the second surface is ground and polished for improved performance. Full prescription data and drawings are available to aid in design integration.

Note: For custom coating options, please [contact us](#).

Compatible Mounts
