

**TECHSPEC®**

**50.8mm Dia x 101.6mm FL, 355nm V-Coat, High Precision Laser Grade Aspheric Lens**



High Precision Laser Grade Aspheric Lenses

Stock **#39-563** [CONTACT US](#)

[Other Coating Options](#)

− 1 + £840.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	£840.00 each
Qty 6-10	£756.00 each
Need More?	<a href="#">Request Quote</a>

**!** Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Aspheric Lens **Type:**

Strehl Ratio is >0.8 by design **Note:**

**Physical & Mechanical Properties**

50.80 +0.00/-0.05	<b>Diameter (mm):</b>
<1	<b>Centering (arcmin):</b>
46.80	<b>Clear Aperture CA (mm):</b>
4.11	<b>Edge Thickness ET (mm):</b>
10.98	<b>Center Thickness CT (mm):</b>
Protective as needed	<b>Bevel:</b>
Plano	<b>Shape of Back Surface:</b>

## Optical Properties

101.60 @ 355nm	<b>Effective Focal Length EFL (mm):</b>
0.25	<b>Numerical Aperture NA:</b>
97.96	<b>Back Focal Length BFL (mm):</b>
<a href="#">Fused Silica</a> (Corning 7980)	<b>Substrate:</b> <input type="checkbox"/>
355	<b>Aspheric Design Wavelength (nm):</b>
$\lambda/40$	<b>Asphere Figure Error, RMS @ 632.8nm:</b>
Laser V-Coat (355nm)	<b>Coating:</b>
$R_{\text{abs}} < 0.25\%$ @ 355nm	<b>Coating Specification:</b>
10-5	<b>Surface Quality:</b>
2	<b>f#:</b>
67.8	<b>Abbe Number (<math>v_d</math>):</b>
355	<b>Design Wavelength DWL (nm):</b>
1.458	<b>Index of Refraction (<math>n_d</math>):</b>
See Technical Information Tab	<b>Spot Size (<math>\mu\text{m}</math>):</b>
Infinite	<b>Conjugate Distance:</b>
355	<b>Focal Length Specification Wavelength (nm):</b>
7.5 J/cm <sup>2</sup> @ 355nm, 20ns, 20Hz	<b>Damage Threshold, By Design:</b> <input type="checkbox"/>
9.84	<b>Power (diopters):</b>

## Material Properties

0.52	<b>Coefficient of Thermal Expansion CTE (10<sup>-6</sup>/°C):</b>
>0.8, by design	<b>Strehl Ratio:</b>

## Regulatory Compliance

<a href="#">View</a>	<b>Certificate of Conformance:</b>
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### 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

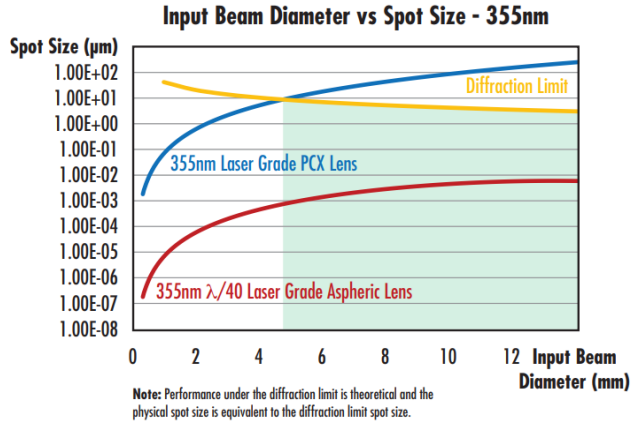
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- Substrate Shape and Coating Optimized for Nd:YAG Laser Wavelengths
- High Precision Aspheric Surface
- Strehl Ratio > 0.8

TECHSPEC® High Precision Laser Grade Aspheric Lenses are polished through precision magnetorheological finishing (MRF), providing them with an ultra-smooth aspheric surface with an aspheric surface tolerance of  $\lambda/40$  RMS. The aberration free aspheric surfaces produced through this super-polishing process result in these aspheric lenses having diffraction-limited performance at their design wavelengths. A high-performance Laser Line V-Coat minimizes reflection when these aspheric lenses are used at their Nd:YAG wavelengths. TECHSPEC High Precision Laser Grade Aspheric Lenses feature substrates designed and shaped at their laser wavelength to optimize the entire lens design, not just the anti-reflection coating, for the laser wavelength. Standard imperial sizes of these laser grade aspheres with  $f/2$  designs, made from fused silica, are available.

## Technical Information



## Compatible Mounts