

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** **1 In Stock**

☐ [Other Coating Options](#)

-

1

+

£840^{.00}

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Volume Pricing	
Qty 1-5	£840.00 each
Qty 6-10	£756.00 each
Need More?	Request Quote

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	Diameter (mm):
<1	Centering (arcmin):
46.80	Clear Aperture CA (mm):
4.11	Edge Thickness ET (mm):
10.98	Center Thickness CT (mm):
Protective as needed	Bevel:
Plano	Shape of Back Surface:

Optical Properties

101.60 @ 355nm	Effective Focal Length EFL (mm):
0.25	Numerical Aperture NA:
97.96	Back Focal Length BFL (mm):
Fused Silica (Corning 7980)	Substrate:
355	Aspheric Design Wavelength (nm):
λ 40	Asphere Figure Error, RMS @ 632.8nm:
Laser V-Coat (355nm)	Coating:
R _{abs} <0.25% @ 355nm	Coating Specification:
10-5	Surface Quality:
2	f/#:
See Technical Information Tab	Spot Size (μm):
Infinite	Conjugate Distance:
7.5 J/cm ² @ 355nm, 20ns, 20Hz	Damage Threshold, By Design:
9.84	Power (diopters):

Material Properties

>0.8, by design	Strehl Ratio:
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Regulatory Compliance

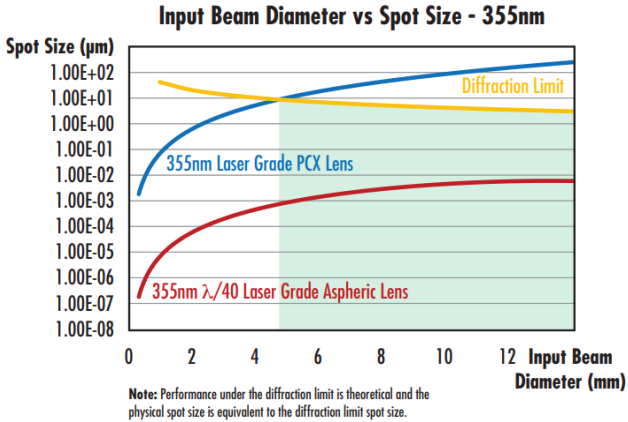
View	Certificate of Conformance:
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Product Details

- 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 λ /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



Custom

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](#).

Compatible Mounts