

TECHSPEC<sup>®</sup>

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

+

€1.050<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €1.050,00 each                |
| Qty 6-10       | €945,00 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    | 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):              |
| <a href="#">Fused Silica</a> (Corning 7980) | Substrate: <div></div>                   |
| 355                                         | Aspheric Design Wavelength (nm):         |
| $\lambda$ 40                                | Asphere Figure Error, RMS @ 632.8nm:     |
| Laser V-Coat (355nm)                        | Coating:                                 |
| R <sub>abs</sub> <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 <sup>2</sup> @ 355nm, 20ns, 20Hz   | Damage Threshold, By Design: <div></div> |
| 9.84                                        | Power (diopters):                        |

Material Properties

|                 |               |
|-----------------|---------------|
| >0.8, by design | Strehl Ratio: |
|-----------------|---------------|

Regulatory Compliance

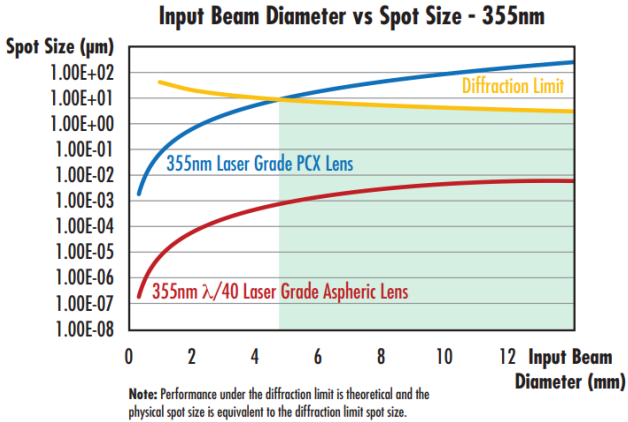
|                      |                             |
|----------------------|-----------------------------|
| <a href="#">View</a> | Certificate of Conformance: |
|----------------------|-----------------------------|

## 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



## 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