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# TECHSPEC® 50mm Dia x 50mm FL, NIR+, High Precision Aspheric Lens

TECHSPEC® High Precision Aspheric Lenses

Stock **#22-909** **1 In Stock**

Other Coating Options

- 1 + **£879**.20

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| Volume Pricing | |
|---|---|
| Qty 1-5 | **£879.20** each |
| Qty 6-10 | **£791.20** each |
| Qty 11+ | **£738.40** each |
| Need More? | Request Quote |

Prices shown are exclusive of VAT/local taxes

Product Downloads

## General

**Type:**
Aspheric Lens

**Note:**
3D Surface Profile not included with coated lenses

## Physical & Mechanical Properties

| | |
|---|---|
| **Diameter (mm):** | 50.00 +0.00/-0.025 |
| **Centering (arcmin):** | <1 |
| **Clear Aperture CA (mm):** | 45.00 |
| **Edge Thickness ET (mm):** | 4.82 |
| **Center Thickness CT (mm):** | 13.06 |
| **Bevel:** | Protective as needed |
| **Shape of Back Surface:** | Plano |

## Optical Properties

| | |
|---|---|
| **Effective Focal Length EFL (mm):** | 50.00 @ 587.6nm |
| **Numerical Aperture NA:** | 0.50 |
| **Back Focal Length BFL (mm):** | 42.77 |
| **Substrate:** | N-SF6 |
| **Aspheric Design Wavelength (nm):** | 587.6 |
| **Asphere Figure Error, RMS @ 632.8nm:** | λ/40 |
| **Coating:** | NIR+ (600-1050nm) |
| **Coating Specification:** | $R_{avg}$ <0.5% @ 600 - 1050nm @ ±30° AOI<br>$R_{abs}$ <1.5% @ 600 - 1050nm @ ±30° AOI |
| **Surface Quality:** | 40-20 |
| **f/#:** | 1 |
| **Wavelength Range (nm):** | 600 - 1050 |
| **Conjugate Distance:** | Infinite |
| **Power (diopters):** | 20.00 |

## Regulatory Compliance

| | |
|---|---|
| **RoHS 2015:** | Compliant |
| **Certificate of Conformance:** | View |
| **Reach 250:** | 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 Precision Aspheric Surface
- 3D Surface Profiles Included with Uncoated Lenses
- Uncoated and <0.25% Reflectance V-Coat Available

TECHSPEC® High Precision Aspheric Lenses guarantee better than λ/40 wave aspheric figure error. Achieved via precision magneto-rheological finishing (MRF), these aspheres offer high numerical apertures with diameters ranging from 15 to 50mm and are ideal for a variety of imaging and low light level applications. Each TECHSPEC High Precision Aspheric Lens is individually measured. 3D surface profiles are included with uncoated lenses. For diffraction-limited aspheres designed at specific Nd:YAG laser wavelengths, see our **TECHSPEC High Precision Laser Grade Aspheric Lenses**.

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