

# CAPABILITIES

## Aspheric lenses

Aspheric lens surfaces are used to correct spherical aberration (where the converging light from a lens does not have a common focal point, resulting in a distorted image) in lasers and imaging. Traditional spherical lenses cannot collimate light effectively because even small angles of incidence can produce spherical aberrations. This can mean that several components may be required to get the desired result.



The non-spherical surface of an aspheric lens allows a single component to effectively focus or collimate even highly divergent emissions, potentially replacing a multi-lens system with a single aspheric lens.

We offer custom aspheric lenses in a range of sizes as small as 2mm diameter up to 100mm or greater. Each lens is designed to our customer's specification and quality requirements.

## Custom capabilities

<b>Diameter:</b>	3mm to 200mm+
<b>Focal length:</b>	3mm to 1000mm+
<b>Centration:</b>	< 3 arcseconds
<b>Surface figure:</b>	< 0.1 fringes
<b>Scratch/dig:</b>	< 10/5
<b>Coating options:</b>	May be AR coated for UV/VIS/NIR
<b>Material options:</b>	Schott glass or equivalent

### Notes:

All products are tested in our state of the art metrology laboratory by our highly trained technicians to ensure compliance with the specification. Parts are then sent to our QA team to be cleaned and checked for surface imperfections before dispatch.

Please contact our technical sales team on (+44) 1622 849 444 to discuss your custom aspheric lens requirements and discover how Knight Optical can help improve your supply chain experience. Alternatively, email us your requirements by clicking on the links below.



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