

## Sapphire diamond turned aspheric lenses

The most frequently requested specifications for sapphire diamond turned aspheric lenses are as follows:

<b>Focal length</b>	up-to 5000 ± 0.1mm or 1% whichever largest
<b>Back focal length</b>	up-to 5000 ± 0.1mm or 1% of focal length
<b>Radius of curvature, S1</b>	up-to 5000 ± 1 fringe across surface
<b>Radius of curvature, S2</b>	up-to 5000 ± 1 fringe across surface
<b>Form error, S1</b>	better than $\lambda/4$ (633nm) over aperture
<b>Form error, S2</b>	better than $\lambda/4$ (633nm) over aperture
<b>Centration (arc second)</b>	less than 60
<b>Centre thickness</b>	up to 100 ± 0.1mm
<b>Edge thickness</b>	minimum 1mm or 1% of centre thickness
<b>Length of aperture</b>	up-to 300 ± 0.1mm
<b>Width of aperture</b>	up-to 300 ± 0.1mm
<b>Diameter</b>	300 ± 0.1mm
<b>Clear aperture</b>	90% of diameter
<b>Edge finish</b>	blacked, ground
<b>Chamfer</b>	0.3x0.3@45°
<b>Surface quality</b>	40-20 scratch/ dig

## Coatings

BBAR coating @1-5 $\mu$ m

Diamond-Like Carbon (DLC) coating @1-5 $\mu$ m

Our capabilities are always expanding so if your requirement is not mentioned above please enquire as we have many years of experience in this field.

Contact our multilingual technical sales team and discover how Knight Optical's high quality sapphire diamond turned aspheric lens capabilities and service can improve your instrumentation and supply chain experience.