

Silicon diamond turned aspheric lenses

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

Focal length	up-to 5000 ± 0.1mm or 1% whichever largest
Back focal length	up-to 5000 ± 0.1mm or 1% of focal length
Radius of curvature, S1	up-to 5000 ± 1 fringe across surface
Radius of curvature, S2	up-to 5000 ± 1 fringe across surface
Form error, S1	better than $\lambda/4$ (633nm) over aperture
Form error, S2	better than $\lambda/4$ (633nm) over aperture
Centration (arc second)	less than 60
Centre thickness	up to 100 ± 0.1mm
Edge thickness	minimum 1mm or 1% of centre thickness
Length of aperture	up-to 300 ± 0.1mm
Width of aperture	up-to 300 ± 0.1mm
Diameter	300 ± 0.1mm
Clear aperture	90% of diameter
Edge finish	blacked, ground
Chamfer	0.3x0.3@45°
Surface quality	10-5 scratch/ dig

Coatings

BBAR coating @ 3-5 μ m

Diamond-Like Carbon (DLC) coating @ 3-5 μ 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 silicon diamond turned aspheric lens capabilities and service can improve your instrumentation and supply chain experience.