

## Knight Optical's BK7 biconvex lenses

Biconvex lenses are one of the most simple lenses, but good quality, glass lenses with both faces convex and spherical. Biconvex lenses are widely used for moderate quality imaging and also for focussing and control of laser beams. Generally biconvex lenses have both surfaces with the same curvature.

Knight Optical's stock range of quality grade N-BK7 or equivalent biconvex lenses are available uncoated or broadband AR coated for visible through to NIR applications. Knight optical also offers custom biconvex lenses to meet your requirements or alternatively edge stock lenses for a quick turnaround. We can supply alternative coatings where requested, including broadband 630-1100nm and 1050-1700nm anti reflective coatings for IR and telecoms applications.

Please note we also stock a full range of UV grade fused silica convex lenses uncoated or AR coated for ultra-violet applications.

Specification See also Options available Docs & drgs Capabilities Applications

<b>Material:</b>	<a href="#">N-BK7 or equivalent</a>
<b>Diameter:</b>	+0.0 / -0.10mm ( ≤ 65mm) +0.0 / -0.15mm ( > 65mm)
<b>Centring accuracy:</b>	5 arcmin
<b>Focal length (@ 587nm):</b>	± 0.2mm (< 10mm) ± 2.0% (10mm - 1000mm) ± 5.0% (> 1000mm)
<b>Centre thickness:</b>	± 0.2mm
<b>Edge thickness:</b>	
Lenses to 2.5mm dia	0.75mm
Lenses to 4.0mm dia	1.0mm
Lenses to ≥6.5mm dia	1.5mm
<b>Surface quality:</b>	<a href="#">&lt;40-20 scratch/dig</a>
<b>Coating:</b>	Planoconvex lenses with suffix "AV2" are coated on both faces with: <a href="#">Extended broadband multilayer antireflective coating &lt;0.5%@450-900nm</a> (AV2 specification)

### [Capabilities - Biconvex Lenses](#)

See also

[UV fused silica biconvex lenses](#)

[Biconvex lens sets \(quality grade\)](#)

### Options available

Stock lenses can be edged to smaller diameters.

- Stock lenses can be ground to rectangular and square shaped apertures.
- Shorter focal lengths in relation to the diameter available.
- Mounting into lens cells.
- Special anti-reflective coatings for broadband applications and wavelengths
- [Broadband Multilayer AR, R.avg<0.4%@1050-1700nm](#)
- [Broadband Multilayer AR, R.avg<0.4%@630-1100nm](#)

### Coatings:

[Extended broadband multilayer antireflective coating <0.5%@450-900nm](#) (AV2 specification)

[Broadband Multilayer AR, R.avg<0.4%@630-1100nm](#) (AI2 custom specification)

[Broadband Multilayer AR, R.avg<0.4%@1050-1700nm](#) (AI3 custom specification)

