

[See all 165 Products in Family](#)

**TECHSPEC® 12mm Dia. x 72mm FL VIS-EXT, Inked, Double-Convex Lens**



Stock **#89-156-INK** [CONTACT US](#)

[Other Coating Options](#)

- 1 + **A\$99<sup>.20</sup>**

**ADD TO CART**

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | <b>A\$99.20</b> each          |
| Qty 10-24      | <b>A\$89.60</b> each          |
| Qty 25-99      | <b>A\$79.60</b> each          |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

**General**

Double-Convex Lens **Type:**

**Physical & Mechanical Properties**

12.00 ±0.025 **Diameter (mm):**

|                                      |   |
|--------------------------------------|---|
| <1                                   | Centering (arcmin):                         |
| Protective as needed                 | Bevel:                                      |
| 2.80                                 | Center Thickness CT (mm):                   |
| ±0.05                                | Center Thickness Tolerance (mm):            |
| 2.31                                 | Edge Thickness ET (mm):                     |
| 11.00                                | Clear Aperture CA (mm):                     |
| <b>Optical Properties</b>            |   |
| 71.07                                | Back Focal Length BFL (mm):                 |
| 72.00                                | Effective Focal Length EFL (mm):            |
| VIS-EXT (350-700nm)                  | Coating:                                    |
| R <sub>avg</sub> <0.5% @ 350 - 700nm | Coating Specification:                      |
| <b>N-BK7</b>                         | Substrate: <input type="checkbox"/>         |
| 40-20                                | Surface Quality:                            |
| 1.5λ                                 | Power (P-V) @ 632.8nm:                      |
| λ/4                                  | Irregularity (P-V) @ 632.8nm:               |
| 73.97                                | Radius R <sub>1</sub> =R <sub>2</sub> (mm): |
| 6.00                                 | f#:   |
| 587.6                                | Focal Length Specification Wavelength (nm): |
| ±1                                   | Focal Length Tolerance (%):                 |
| 0.08                                 | Numerical Aperture NA:                      |
| 350 - 700                            | Wavelength Range (nm):                      |

|                              |                             |
|------------------------------|-----------------------------|
| <b>Regulatory Compliance</b> |                             |
| <a href="#">View</a>         | Certificate of Conformance: |

## Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 350 - 700nm
- Minimize Aberrations Including Spherical and Coma
- [UV Fused Silica DCX Lenses](#) Available
- Other Coating Options Available: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [NIR I](#), [NIR II](#), [VIS-NIR](#), and [YAG-BBAR](#)

TECHSPEC® VIS-EXT Coated Double-Convex (DCX) Lenses, also referred to as bi-convex lenses, have two positive, symmetrical faces with equal radii on both sides. These lenses are generally recommended for finite imaging applications with a conjugate ratio (ratio between object distance and image distance) between 0.2 and 5. At a conjugate ratio of 1, aberrations such as spherical aberration, chromatic aberration, coma, and distortion are minimized or cancelled due to the symmetric lens design. TECHSPEC VIS-EXT Coated Double-Convex Lenses are available in a variety of substrates and coating options for the visible and NIR spectra.

## Technical Information





**N-BK7 with MgF<sub>2</sub> Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with VIS-EXT Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with VIS-NIR Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$\begin{aligned} R_{abs} &\leq 0.25\% \text{ @ } 880\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 400 - 870\text{nm} \\ R_{avg} &\leq 1.25\% \text{ @ } 890 - 1000\text{nm} \end{aligned}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with VIS 0° Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

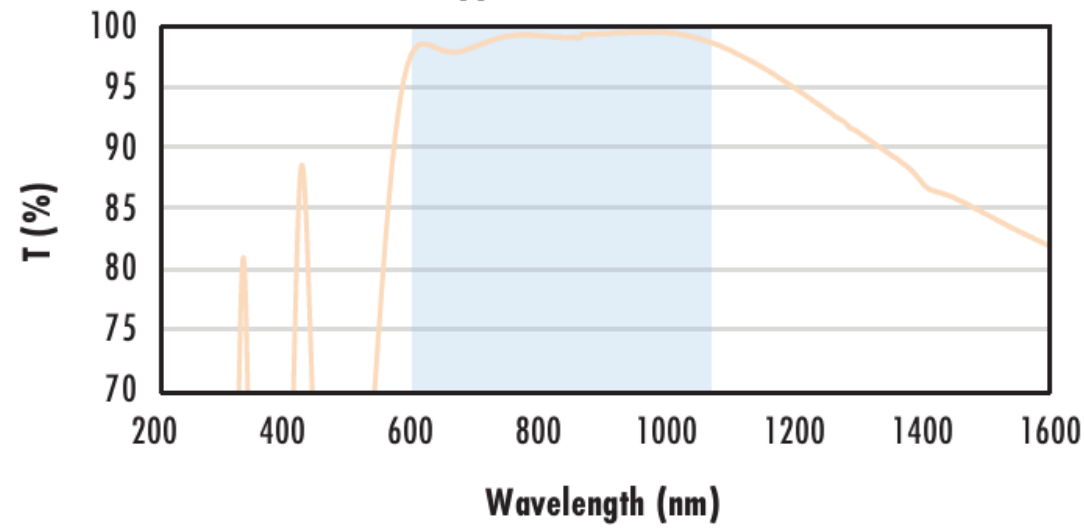
**N-BK7 with YAG-BBAR Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.



**N-BK7 with NIR I Coating  
Typical Transmission**



**N-BK7 with NIR II Coating  
Typical Transmission**



**Compatible Mounts**