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## TECHSPEC® 15mm Dia. x 15mm FL VIS-EXT, Inked, Double-Convex Lens



Stock **#89-157-INK** [CONTACT US](#)

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1  MRP ₹6,691

Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	₹6,691 each
Qty 10-24	₹6,053 each
Qty 25-99	₹5,363 each
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### Product Downloads

### General

Double-Convex Lens **Type:**

### Physical & Mechanical Properties

Diameter (mm):

15.00 ±0.025

Centering (arcmin):  
<1

Bevel:  
Protective as needed

Center Thickness CT (mm):  
4.50

Center Thickness Tolerance (mm):  
±0.10

Edge Thickness ET (mm):  
1.93

Clear Aperture CA (mm):  
14.00

### Optical Properties

Back Focal Length BFL (mm):  
13.68

Effective Focal Length EFL (mm):  
15.00

Coating:  
VIS-EXT (350-700nm)

Coating Specification:  
R<sub>avg</sub> <0.5% @ 350 - 700nm

Substrate:   
N-SF11

Surface Quality:  
40-20

Power (P-V) @ 632.8nm:  
1.5λ

Irregularity (P-V) @ 632.8nm:  
λ/4

Radius R<sub>1</sub>=R<sub>2</sub> (mm):  
22.51

f#:  
1.00

Focal Length Specification Wavelength (nm):  
587.6

Focal Length Tolerance (%):  
±1

Numerical Aperture NA:  
0.50

Wavelength Range (nm):  
350 - 700

### Regulatory Compliance

Certificate of Conformance:  
[View](#)

Country of Origin:  
Japan

Imported By:  
Edmund Optics India Private Limited  
267, Greystone Building, Second Floor,  
6th Cross Rd, Binnamangala,  
Stage 1, Indiranagar, Bengaluru,  
Karnataka, India 560038  
Phone: +91- 80-6845 0000

## 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

### Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV- NIR spectra.

[Click Here to Download Data](#)

### 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:

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

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.

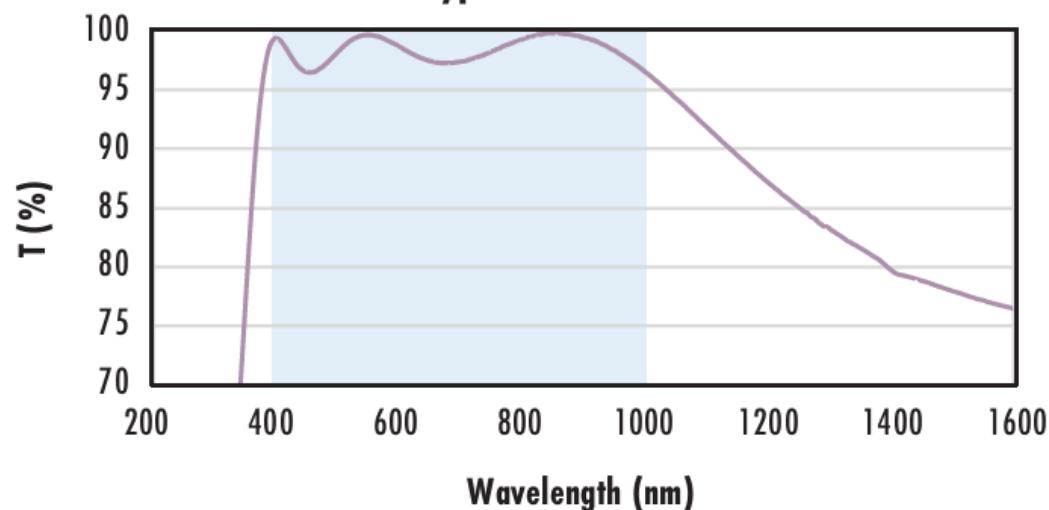
The blue shaded region indicates the coating design wavelength range, with the following specification:

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

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:

$$R_{abs} \leq 0.25\% @ 880\text{nm}$$

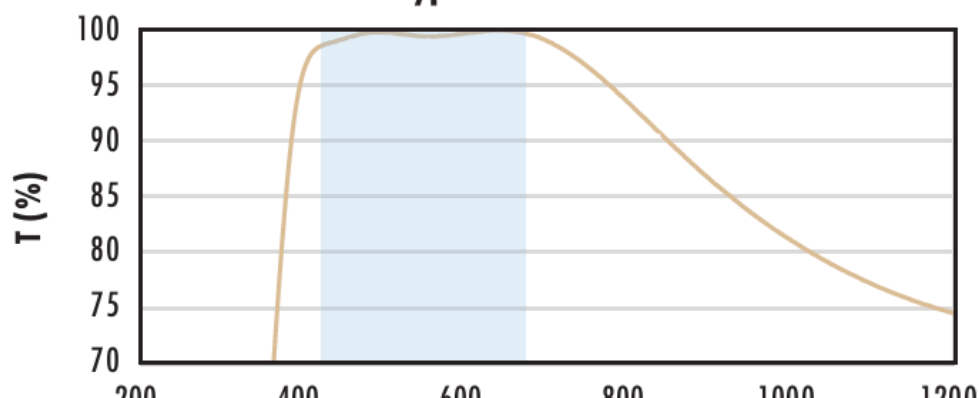
$$R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$$

$$R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$$

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:

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

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

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<p style="text-align: center;">200      400      600      800      1000      1200</p> <p style="text-align: center;"><b>Wavelength (nm)</b></p> <p style="text-align: center;"><b>N-BK7 with YAG-BBAR Coating Typical Transmission</b></p> <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600</p> <p style="text-align: center;"><b>Wavelength (nm)</b></p>	<p>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;"><math>R_{abs} \leq 0.25\% @ 532nm</math>  <math>R_{abs} \leq 0.25\% @ 1064nm</math>  <math>R_{avg} \leq 1.0\% @ 500 - 1100nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>N-BK7 with NIR I Coating Typical Transmission</b></p> <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600</p> <p style="text-align: center;"><b>Wavelength (nm)</b></p>	<p>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;"><math>R_{avg} \leq 0.5\% @ 600 - 1050nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>N-BK7 with NIR II Coating Typical Transmission</b></p> <p style="text-align: center;">200      400      600      800      1000      1200      1400      1600      1800      2000</p> <p style="text-align: center;"><b>Wavelength (nm)</b></p>	<p>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p style="text-align: center;"><math>R_{abs} \leq 1.5\% @ 750 - 800nm</math>  <math>R_{abs} \leq 1.0\% @ 800 - 1550nm</math>  <math>R_{avg} \leq 0.7\% @ 750 - 1550nm</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p style="text-align: center;"><a href="#">Click Here to Download Data</a></p>

**Compatible Mounts**