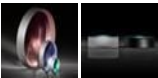


TECHSPEC[®] 6mm Diameter x -18 FL, VIS-NIR, Inked, Plano-Concave Lens



TECHSPEC VIS-NIR Coated Plano-Concave (PCV) Lenses



Stock **#45-912-INK** **1 In Stock**

[Other Coating Options](#)

-

1

+

₹4,770

ADD TO CART

Volume Pricing	
Qty 1-9	₹4,770 each
Qty 10-25	₹4,275 each
Qty 26-49	₹3,825 each
Need More?	Request Quote

Product Downloads

General

Type:
Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):

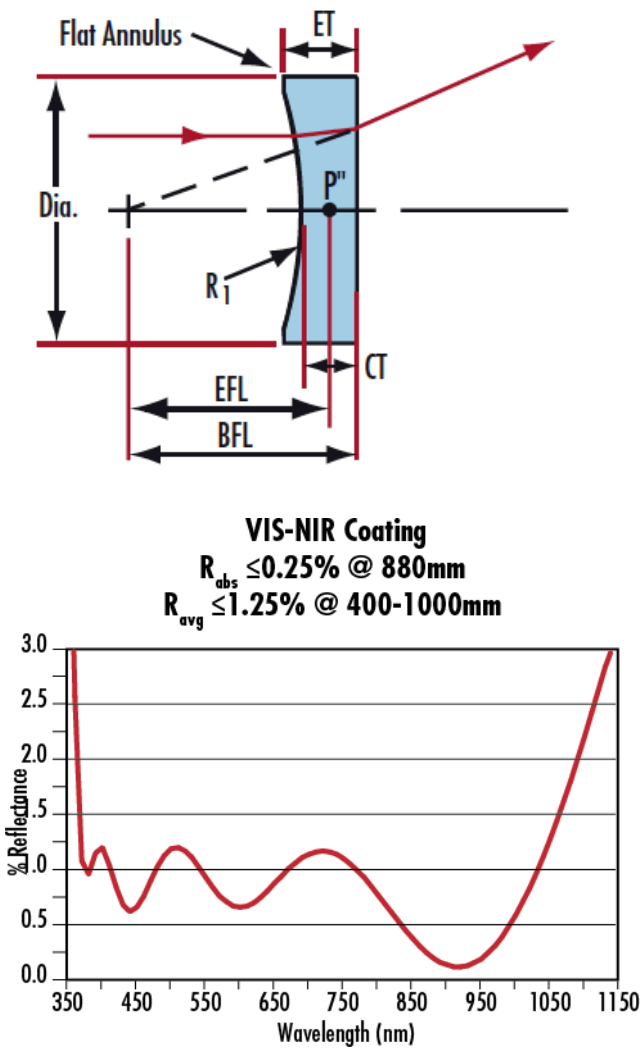
6.00 ±0.025	
Protective as needed	Bevel:
Center Thickness CT (mm):	
2.00	
Center Thickness Tolerance (mm):	
±0.05	
Centering (arcmin):	
<1	
Clear Aperture CA (mm):	
5.4	
Edge Thickness ET (mm):	
2.40	
Optical Properties	
Effective Focal Length EFL (mm):	
-18.00	
N-BK7	Substrate: ☐
f#:	
3.00	
Numerical Aperture NA:	
0.17	
Coating:	
VIS-NIR (400-1000nm)	
Wavelength Range (nm):	
400 - 1000	
Back Focal Length BFL (mm):	
-19.32	
Coating Specification:	
R _{abs} ≤0.25% @ 880nm	
R _{avg} ≤1.25% @ 400 - 870nm	
R _{avg} ≤1.25% @ 890 - 1000nm	
Focal Length Specification Wavelength (nm):	
587.6	
Focal Length Tolerance (%):	
±1	
Radius R ₁ (mm):	
-9.30	
Surface Quality:	
40-20	
Damage Threshold, By Design: ☐	
5 J/cm² @ 532nm, 10ns	
Power (P-V) @ 632.8nm:	
1.5λ	
Irregularity (P-V) @ 632.8nm:	
λ/4	
Regulatory Compliance	
Certificate of Conformance:	
View	
Country of Origin:	
Japan	
Imported By:	
Edmund Optics India Private Limited	

Product Details

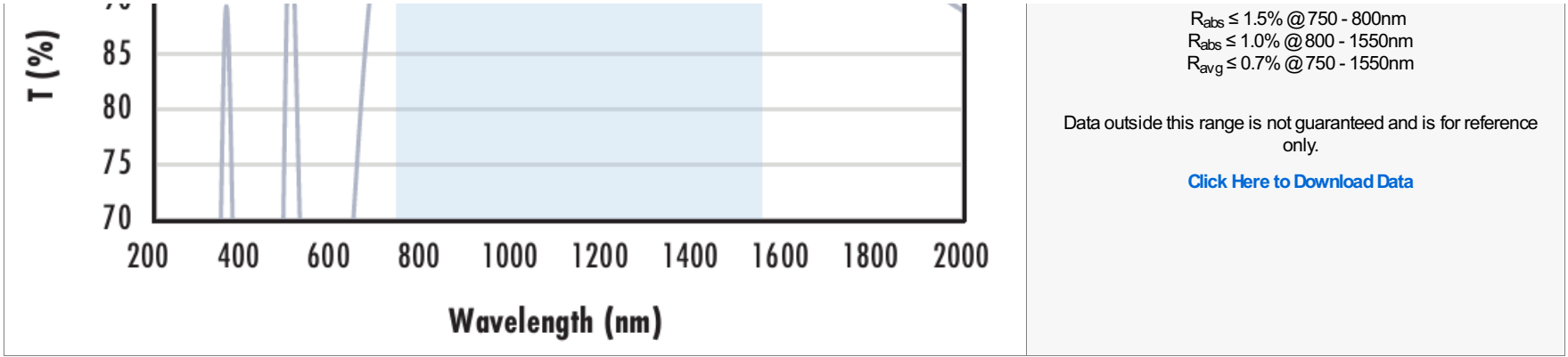
- AR Coated to Provide <1.25% Reflectance per Surface for 400 - 1000nm
- <0.25% Reflectance @ 880nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion and telescopes. TECHSPEC® VIS-NIR Coated Plano-Concave (PCV) Lenses are optimized for transmission (>99%) in the near-infrared. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF₂](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information



N-BK7	
Uncoated N-BK7 Typical Transmission The graph shows transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 2200). The transmission curve starts at ~70% at 200nm, rises sharply to ~92% by 400nm, and remains relatively flat until 2000nm, then slightly decreases to ~88% at 2200nm.	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data
N-BK7 with MgF₂ Coating Typical Transmission The graph shows transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 2200). The transmission curve starts at ~70% at 200nm, rises to ~95% by 400nm, and remains high until 2000nm, then slightly decreases to ~90% at 2200nm. A blue shaded region highlights the design wavelength range from 400nm to 700nm.	Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 1.75\% @ 400 - 700nm$ (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 The graph shows transmission T (%) on the y-axis (70 to 100) versus wavelength (nm) on the x-axis (200 to 1200). The transmission curve starts at ~70% at 200nm, rises to ~98% by 400nm, and remains high until 700nm, then decreases to ~78% at 1200nm. A blue shaded region highlights the design wavelength range from 350nm to 700nm.	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: $R_{avg} \leq 0.5\% @ 350 - 700nm$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data



Coating Curves

Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Compatible Mounts