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TECHSPEC®

75.0mm Dia. x 7.62mm Thick

Standard Plano-Convex Lens



Stock #86-907 **3 In Stock** [Other Coating Options](#)

- 1 +

€144⁰⁰

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Volume Pricing	
Qty 1-9	€144,00 each
Qty 10-24	€130,00 each
Qty 25-49	€115,00 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- PDF Drawing:pdf
- ISO 10110 Drawing
- IGES:igs
- Zemax:zar
- Zemax:zmx
- eDrawing:eprt
- Code V:seq
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General

Type: Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):	75.00 +0.0/-0.025	Centering (arcmin):	<1
Center Thickness CT (mm):	32.62 ±0.10	Edge Thickness ET (mm):	3.66
Clear Aperture CA (mm):	73.5	Bevel:	Protective as needed

Optical Properties

Effective Focal Length EFL (mm):	75.00 @ 587.6nm	Back Focal Length BFL (mm):	53.49
Coating:	VIS 0° (425-675nm)	Coating Specification:	R _{avg} ≤0.4% @ 425 - 675nm
Substrate:	N-BK7	Surface Quality:	40-20
Power (P-V) @ 632.8nm:	1.5λ	Irregularity (P-V) @ 632.8nm:	λ/4
Focal Length Tolerance (%):	±1	Radius R₁ (mm):	38.76
f/#:	1	Numerical Aperture NA:	0.50

Wavelength Range (nm): 425 - 675

Damage Threshold, Reference: 5 J/cm² @ 532nm, 10ns ⓘ

Regulatory Compliance

RoHS 2015: **Compliant**

Reach 235: **Compliant**

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Need different specs or modifications?

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](#).

Product Details

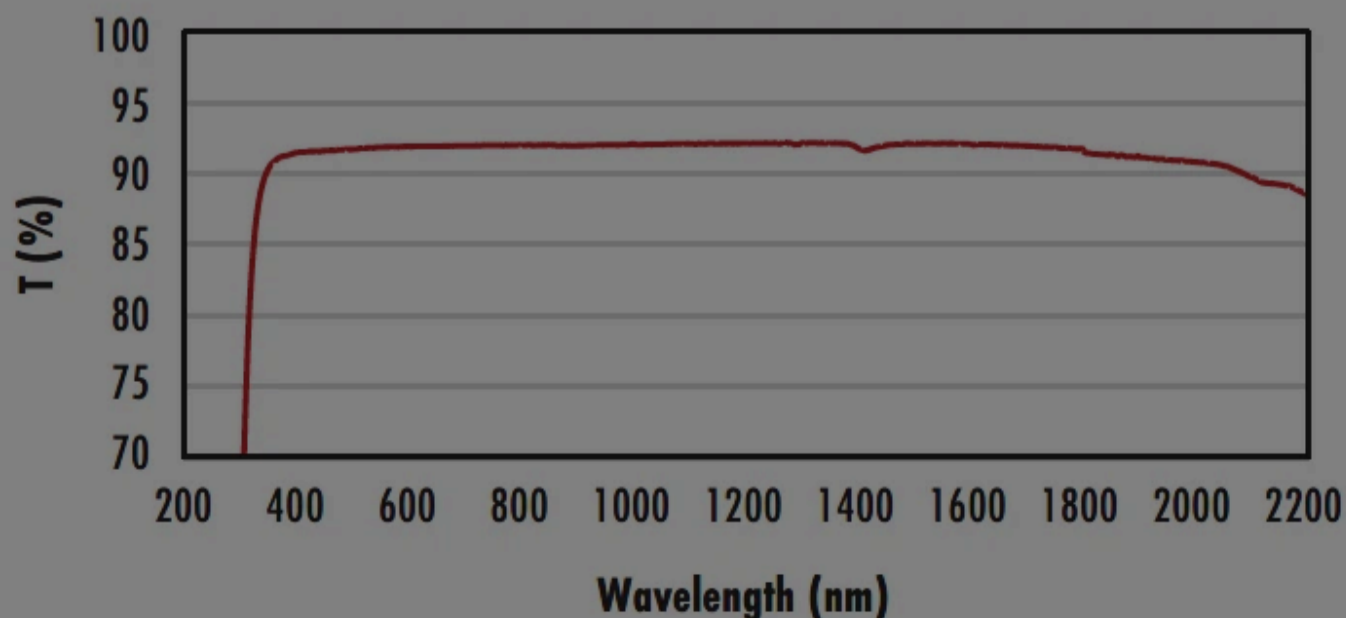
- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: **Uncoated**, **MgF₂**, **VIS-NIR**, **NIR I**, **NIR II**, **VIS-EXT**, and **YAG-BBAR**

TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. Plano-Convex lenses are ideal for a multitude of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms. TECHSPEC® VIS 0° Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered **uncoated** or with broadband anti-reflective (BBAR) coatings, which include **MgF₂**, **VIS-NIR**, **NIR I**, **NIR II**, **VIS-EXT**, and **YAG-BBAR**.

These coated lenses can be utilized in a host of optics and photonics applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

Technical Information

Uncoated N-BK7 Typical Transmission



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

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N-BK7 with MgF₂ Coating Typical Transmission



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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:

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

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

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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.

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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.

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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.

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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.

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

$$R_{abs} \leq 0.25\% \text{ @ } 532\text{nm}$$

$$R_{abs} \leq 0.25\% \text{ @ } 1064\text{nm}$$

$$R_{avg} \leq 1.0\% \text{ @ } 500 - 1100\text{nm}$$

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

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N-BK7 with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

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

$$R_{avg} \leq 0.5\% \text{ @ } 600 - 1050\text{nm}$$

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

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N-BK7 with NIR II Coating Typical Transmission



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Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

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

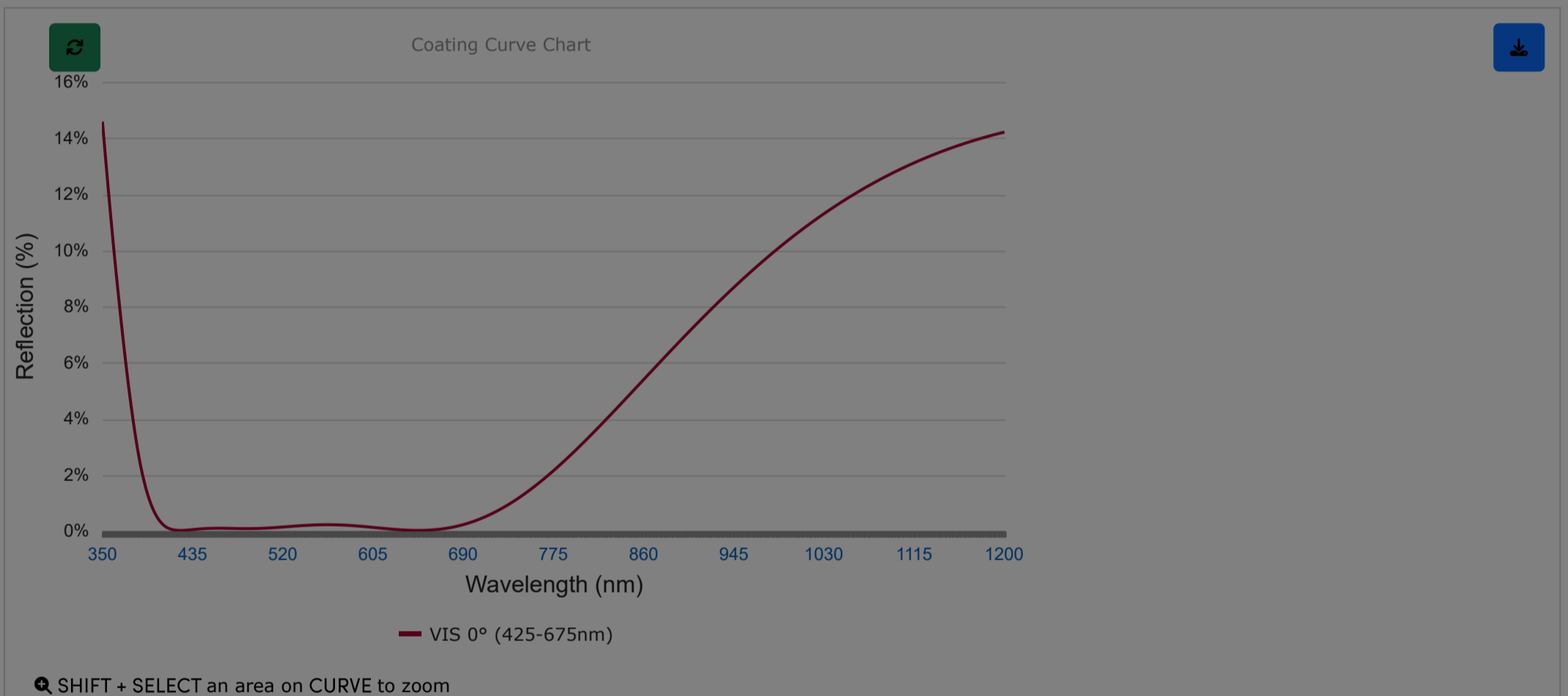
- $R_{abs} \leq 1.5\%$ @ 750 - 800nm
- $R_{abs} \leq 1.0\%$ @ 800 - 1550nm
- $R_{avg} \leq 0.7\%$ @ 750 - 1550nm

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

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Coating Curves

VIS 0° (425-675nm)



Please note that coating performance outside each product's specified design range is theoretical and may vary.

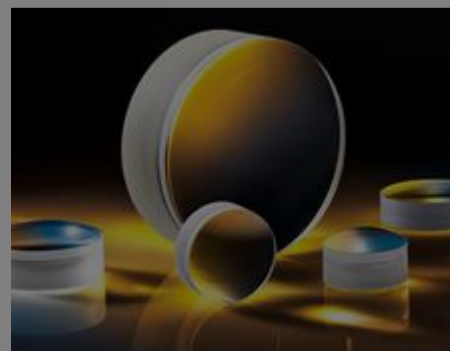
Related Products



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Optic Component Mounts



VIS 0° Coated Achromatic Lenses



VIS 0° Coated Double-Convex (DCX) Lenses

Frequently Purchased Together

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#03-666 – 8.0 – 118.0 Optic Height, English Bar-Type Optic Holder
€120,00



#36-466 – 75.0/76.2mm Optic Dia., Optical Cell Assembly
€237,00



#46-244 – 75mm Diameter x 50mm FL, Aspheric Condenser Lens
€104,00



#47-342 – 25.0mm Dia. x 25.0mm FL, VIS 0° Coated, Plano-Convex Lens
€49,75

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+	75.0/76.2mm Optic Dia., SM3 Thin Mount	Fixed		#18-703	€79,50 Request Quote	20+ In Stock <input type="text" value="1"/> <input type="button" value="🛒"/>

Check out our full selection of mounts [here](#).

Resources

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