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TECHSPEC®

12.5mm Dia x 50mm FL VIS 0° Coated, Illumination Grade PCX Cylinder Lens



Stock #69-718 **6 In Stock**

1 C\$141^{.40}

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Volume Pricing	
Qty 1-5	C\$141.40 each
Qty 6-25	C\$126.70 each
Qty 26-49	C\$119.70 each
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Product Downloads	
STEP:stp	PDF Drawing:pdf
IGES:igs	Zemax:zar
Zemax:zmx	eDrawing:eprt
Code V:seq	EO Spec Sheet
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General

Type: Cylinder Lens, Plano-Convex

Physical & Mechanical Properties

Diameter (mm):	12.50	Center Thickness CT (mm):	1.89
Center Thickness Tolerance (mm):	±0.1	Dimensional Tolerance (mm):	+0.0/-0.2
Edge Thickness ET (mm):	1.13		

Optical Properties

Effective Focal Length EFL (mm):	50.00	Substrate:	N-BK7
f/#:	4	Numerical Aperture NA:	0.13
Coating:	VIS 0° (425-675nm)	Wavelength Range (nm):	425 - 675
Back Focal Length BFL (mm):	48.75	Coating Specification:	R _{avg} ≤0.4% @ 425 - 675nm
Focal Length Tolerance (%):	±3	Radius R₁ (mm):	25.93
Surface Quality:	60-40	Damage Threshold, Reference:	5 J/cm ² @ 532nm, 10ns

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: [View](#)

Reach 235: **Compliant**

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

- N-BK7 Substrate for Broadband Performance
- Cost-Effective for OEM Integration
- Multiple Coating Options Available

TECHSPEC® Illumination Grade PCX Cylinder Lenses are similar to Plano-Convex (PCX) lenses in profile, but include a portion of a cylinder instead of a sphere. These lenses focus light in one dimension and can transform a point of light into a line. TECHSPEC® Illumination Grade PCX Cylinder Lenses are available in circular and rectangular versions, along with multiple coating options. Cylinder lenses are ideal for line projection in machine vision applications or guidance systems.

Note: For negative focal length cylinder lenses, see our [TECHSPEC® Illumination Grade PCV Cylinder Lenses](#).

LASER OPTICS

 MADE BY EDMUND OPTICS®

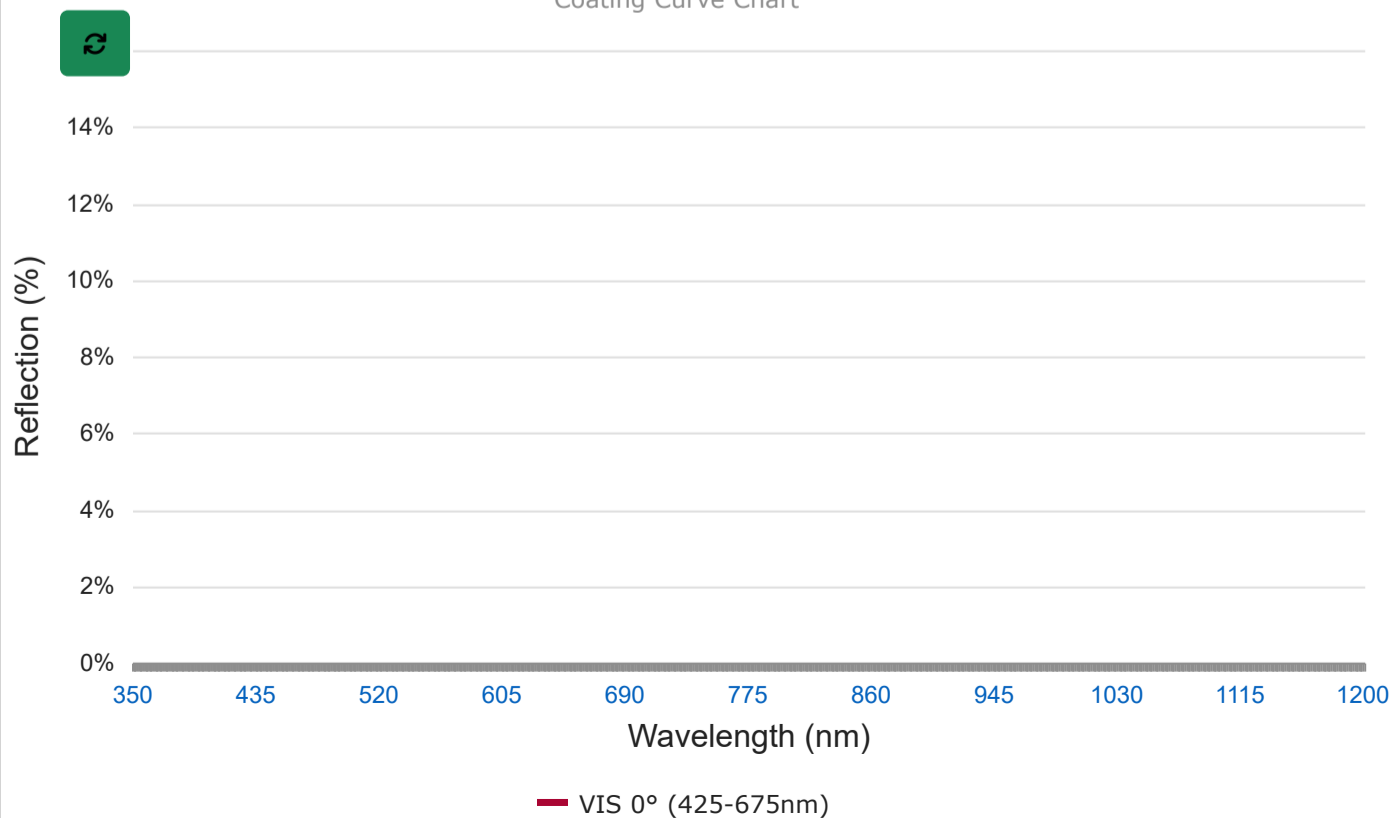
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Technical Information

Coating Curves

VIS 0° (425-675nm)

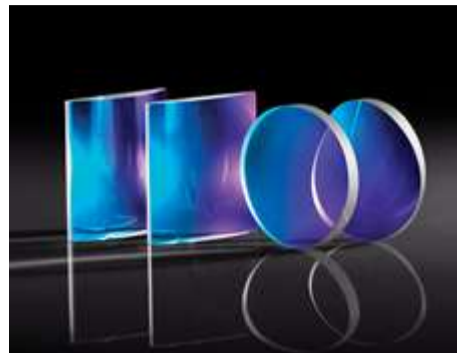
Coating Curve Chart



Related Products



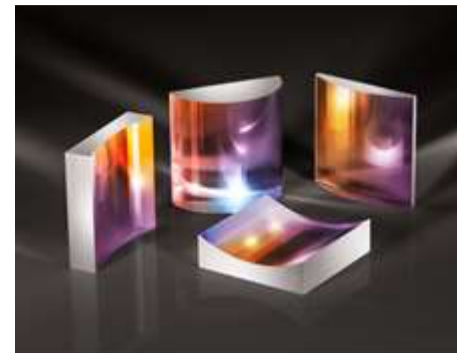
Illumination Grade PCV Cylinder Lenses



Imaging Grade PCX Cylinder Lenses



Laser Grade Laser Line Cylinder Lenses



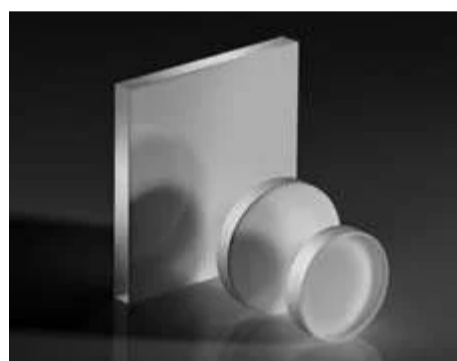
Laser Grade Broadband Cylinder Lenses

Frequently Purchased Together



#45-303 - 12.0mm Dia. x 15.0mm FL, MgF₂ Coated, Plano-Convex Lens
C\$58.10

Qty



#46-105 - 12.5mm Diameter Opal Diffusing Glass
C\$166.60

Qty



#47-347 - 25.0mm Dia. x 60.0mm FL, VIS 0° Coated, Plano-Convex Lens
C\$66.50

Qty



#45-943 - 10.0mm Diameter x 20.0mm Length, N-BK7 Rod Lens
C\$124.60

Qty

Resources

Media Type

- Application Note
- Trending in Optics
- Published Article
- FAQ
- Glossary
- Video

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

Laser Beam Shaping Overview

TRENDING IN OPTICS

Non-Circular Optics for System Miniaturization

APPLICATION NOTE

What are Cylinder Lenses?

APPLICATION NOTE

Considerations When Using Cylinder Lenses

PUBLISHED ARTICLE

Cylinder Lenses for Beam Shaping

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