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TECHSPEC®

12.5mm H x 25mm L x -25mm FL NIR I Coated, Illumination Grade PCV Cylinder Lens



TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock #69-818 **1 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
Need More?	Request Quote

Product Downloads	
STEP:stp	Curve:pdf
PDF Drawing:pdf	IGES:igs
Curve (xlsx)	Zemax:zar
Zemax:zmx	eDrawing:eprt
Code V:seq	EO Spec Sheet
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General

Type: Cylinder Lens, Plano-Concave

Physical & Mechanical Properties

Center Thickness CT (mm):	2.50	Center Thickness Tolerance (mm):	±0.1
Dimensional Tolerance (mm):	+0.0/-0.2	Dimensions (mm):	12.5 x 25.0
Edge Thickness ET (mm):	3.95		

Optical Properties

Effective Focal Length EFL (mm):	-25.00	Substrate:	 ⓘ N-BK7
Coating:	NIR I (600-1050nm)	Wavelength Range (nm):	600 - 1050
Back Focal Length BFL (mm):	-26.65	Coating Specification:	R _{avg} ≤ 0.5% @ 600 - 1050nm
Focal Length Tolerance (%):	±3	Radius R₁ (mm):	-12.92
Surface Quality:	60-40	Damage Threshold, By Design:	 ⓘ 7 J/cm ² @ 1064nm, 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

- Cylinder Lenses Ideal for 1 Dimensional Laser Beam Convergence
- Circular and Rectangular Form Factors
- Multiple Coating Options Available

TECHSPEC® Illumination Grade PCV Cylinder Lenses are commonly used to turn a collimated laser source into a line generator. These PCV Cylinder Lenses and [TECHSPEC Illumination Grade PCX Cylinder Lenses](#) can be used together for beam expander applications.

The thin lens approximation for the length of a line generated by a negative cylinder lens is: $L = 2 * (r_0/f) * (z + f)$ where L is the line length, r_0 is half the beam diameter, z is the projection distance, and $-f$ is the focal length of the lens.

Technical Information

Related Products



Laser Grade Broadband
Cylinder Lenses



Laser Grade Laser Line
Cylinder Lenses



Imaging Grade PCV
Cylinder Lenses



Illumination Grade PCX
Cylinder Lenses

Frequently Purchased Together



#03-676 - 7.0 - 40.0 Optic Height,
English Bar-Type Optic Holder
C\$148.40



#45-855 - 50 x 50mm 50R/50T, NIR
Plate Beamsplitter
C\$387.80



#47-156 - 50mm Dia. 1064nm 45°,
Nd:YAG Laser Line Mirror
C\$438.20



#47-624 - 15° Beam Dev. VIS-NIR
Coated, N-BK7 Wedge Prism
C\$96.60

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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