

**TECHSPEC® 12.5mm Dia x -100mm FL NIR I Coated, Illumination Grade PCV Cylinder Lens**



TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock **#69-816** **20+ In Stock**

⊖ 1 ⊕ **S\$128<sup>00</sup>**

**ADD TO CART**

Volume Pricing	
Qty 1-5	<b>S\$128.00</b> each
Qty 6-25	<b>S\$115.00</b> each
Qty 26-49	<b>S\$108.00</b> each
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Product Downloads

**SPECIFICATIONS**

**General**

Cylinder Lens, Plano-Concave **Type:**

**Physical & Mechanical Properties**

12.50 +0.0/-0.2	Diameter (mm):
2.00	Center Thickness CT (mm):
±0.1	Center Thickness Tolerance (mm):
2.38	Edge Thickness ET (mm):

### Optical Properties

-100.00	Effective Focal Length EFL (mm):
<b>N-BK7</b>	Substrate: <input type="checkbox"/>
8.00	f#:
0.06	Numerical Aperture NA:
NIR I (600-1050nm)	Coating:
600 - 1050	Wavelength Range (nm):
-101.32	Back Focal Length BFL (mm):
$R_{avg} \leq 0.5\% @ 600 - 1050nm$	Coating Specification:
±3	Focal Length Tolerance (%):
-51.68	Radius $R_1$ (mm):
60-40	Surface Quality:
$7 J/cm^2 @ 1064nm, 10ns$	Damage Threshold, By Design: <input type="checkbox"/>

### Regulatory Compliance

<b>Compliant</b>	RoHS 2015:
<b>View</b>	Certificate of Conformance:
<b>Compliant</b>	Reach 235:

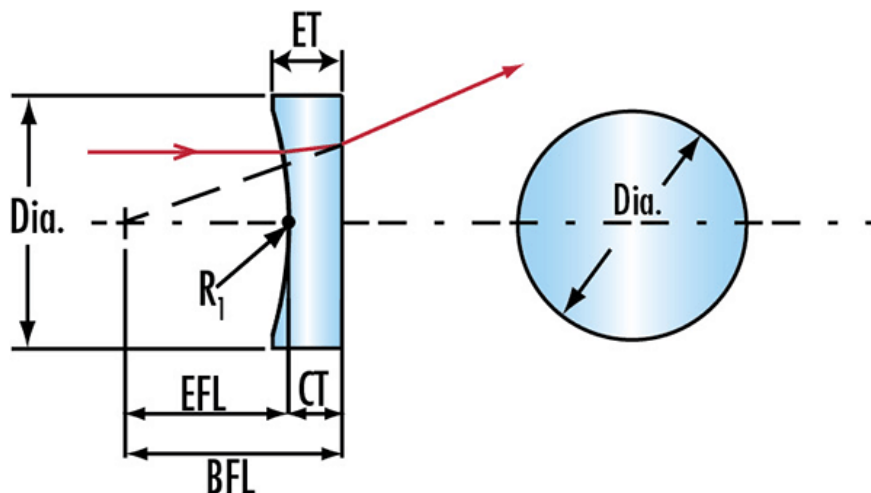
## PRODUCT DETAILS

- 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



## 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](#).

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