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**TECHSPEC®**

## 12.5mm H x 25mm L x -150mm FL VIS-NIR Coated, Illumination Grade PCV Cylinder Lens



TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock **#69-842** **6 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

#### General

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

#### Physical & Mechanical Properties

2.50 **Center Thickness CT (mm):**

**Center Thickness Tolerance (mm):**

±0.1

Dimensions (mm):

12.5 x 25.0

Edge Thickness ET (mm):

2.73

## Optical Properties

Effective Focal Length EFL (mm):

-150.00

Substrate:

N-BK7

Coating:

VIS-NIR (400-1000nm)

Wavelength Range (nm):

400 - 1000

Back Focal Length BFL (mm):

-151.65

Coating Specification:

$R_{abs} \leq 0.25\%$  @ 880nm  
 $R_{avg} \leq 1.25\%$  @ 400 - 870nm  
 $R_{avg} \leq 1.25\%$  @ 890 - 1000nm

Focal Length Tolerance (%):

±3

Radius  $R_1$  (mm):

-77.52

Surface Quality:

60-40

Damage Threshold, By Design:

5 J/cm<sup>2</sup> @ 532nm, 10ns

## Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

Reach 235:

Compliant

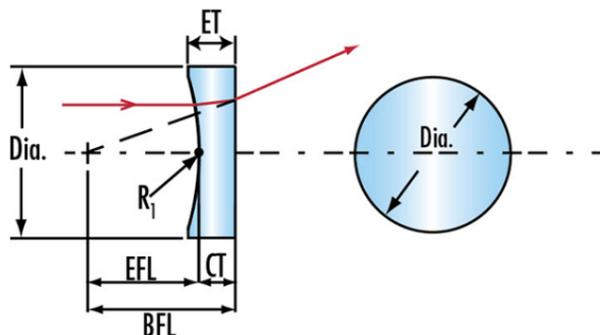
## Product Details

- 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



## 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](#).

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