

TECHSPEC<sup>®</sup> 12.5mm Dia x -50mm FL NIR I Coated, Illumination Grade PCV Cylinder Lens



TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock #69-815 9 In Stock

-

1

+

C\$141<sup>40</sup>

ADD TO CART

| 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?     | <a href="#">Request Quote</a> |

Product Downloads

| General                          |                           |
|----------------------------------|---------------------------|
| Cylinder Lens, Plano-Concave     | Type:                     |
| Physical & Mechanical Properties |                           |
| 12.50 +0.0/-0.2                  | Diameter (mm):            |
| 2.00                             | Center Thickness CT (mm): |

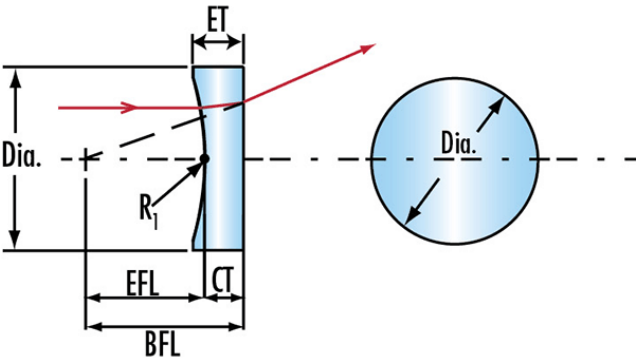
|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| ±0.1                                  | Center Thickness Tolerance (mm):                      |
| 2.77                                  | Edge Thickness ET (mm):                               |
| Optical Properties                    |                                                       |
| -50.00                                | Effective Focal Length EFL (mm):                      |
| N-BK7                                 | Substrate: <input type="checkbox"/>                   |
| 4.00                                  | f/#:                                                  |
| 0.13                                  | Numerical Aperture NA:                                |
| NIR I (600-1050nm)                    | Coating:                                              |
| 600 - 1050                            | Wavelength Range (nm):                                |
| -51.32                                | Back Focal Length BFL (mm):                           |
| R <sub>avg</sub> ≤0.5% @ 600 - 1050nm | Coating Specification:                                |
| ±3                                    | Focal Length Tolerance (%):                           |
| -25.84                                | Radius R <sub>1</sub> (mm):                           |
| 60-40                                 | Surface Quality:                                      |
| 7 J/cm <sup>2</sup> @ 1064nm, 10ns    | Damage Threshold, By Design: <input type="checkbox"/> |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | 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](#).

