

**TECHSPEC® 12.5mm Dia x -50mm FL MgF<sub>2</sub> Coated, Illumination Grade PCV Cylinder Lens**



TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock **#48-377** **20+ In Stock**

⊖ 1 ⊕ €66.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€66,00 each
Qty 6-25	€60,00 each
Qty 26-49	€57,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

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

**Physical & Mechanical Properties**

12.50 +0.0/-0.2 **Diameter (mm):**

**Center Thickness CT (mm):**

2.00

Center Thickness Tolerance (mm):

±0.1

Edge Thickness ET (mm):

2.77

### Optical Properties

Effective Focal Length EFL (mm):

-50.00

Substrate:

N-BK7

f#:

4.00

Numerical Aperture NA:

0.13

Coating:

MgF<sub>2</sub> (400-700nm)

Wavelength Range (nm):

400 - 700

Back Focal Length BFL (mm):

-51.32

Coating Specification:

R<sub>avg</sub> ≤ 1.75% @ 400 - 700nm

Focal Length Tolerance (%):

±3

Radius R<sub>1</sub> (mm):

-25.84

Surface Quality:

60-40

Damage Threshold, By Design:

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

### Regulatory Compliance

RoHS 2015:

Compliant

Reach 209:

Compliant

Certificate of Conformance:

[View](#)

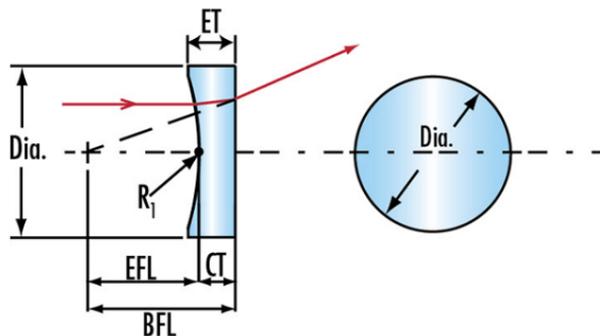
## Product Details

- 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<sub>0</sub> 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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