

TECHSPEC® 10mm Dia x 50mm FL MgF₂ Coated, Illumination Grade PCX Cylinder Lens



Stock **#47-770** **3 In Stock**

⊖ 1 ⊕ **A\$229⁰⁰**

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Volume Pricing	
Qty 1-5	A\$229.00 each
Qty 6-25	A\$208.00 each
Qty 26-49	A\$196.00 each
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Product Downloads

General

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

Physical & Mechanical Properties

10.00 **Diameter (mm):**

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

Center Thickness Tolerance (mm):

±0.1

Dimensional Tolerance (mm):

+0.0/-0.2

Edge Thickness ET (mm):

1.51

Tilt Tolerance (mm):

±0.1 over H

Wedge Tolerance (arcmin):

15.00

Optical Properties

Effective Focal Length EFL (mm):

50.00

Substrate:

N-BK7

f#:

5

Numerical Aperture NA:

0.10

Coating:

MgF₂ (400-700nm)

Wavelength Range (nm):

400 - 700

Back Focal Length BFL (mm):

48.68

Coating Specification:

R_{avg} ≤ 1.75% @ 400 - 700nm

Focal Length Tolerance (%):

±3

Radius R₁ (mm):

25.84

Surface Quality:

60-40

Damage Threshold, By Design:

10 J/cm² @ 532nm, 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

- N-BK7 Substrate for Broadband Performance
- Cost-Effective for OEM Integration
- Multiple Coating Options Available

TECHSPEC® Illumination Grade PCX Cylinder Lenses are similar to Plano-Convex (PCX) lenses in profile, but include a portion of a cylinder instead of a sphere. These lenses focus light in one dimension and can transform a point of light into a line. TECHSPEC® Illumination Grade PCX Cylinder Lenses are available in circular and rectangular versions, along with multiple coating options. Cylinder lenses are ideal for line projection in machine vision applications or guidance systems.

Note: For negative focal length cylinder lenses, see our [TECHSPEC® Illumination Grade PCV Cylinder Lenses](#).

LASER OPTICS MADE BY EDMUND OPTICS®

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Circular And Rectangular Cylinder Lenses



PCX Circular

Coating Curves

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