TECHSPEC®

25mm Dia x -75mm FL MgF_2 Coated, Illumination Grade PCV Cylinder Lens

TECHSPEC® Illumination Grade PCV Cylinder Lenses

Stock #48-381 4 In Stock

- 1 +

C$135.80

ADD TO CART

Volume Pricing	
Qty 1-5	C$135.80 each
Qty 6-25	C$121.80 each
Qty 26-49	C$115.50 each
Need More?	Request Quote

Product Downloads

STEP:step | PDF Drawing:pdf | IGES:igs | Zemax:zar | Zemax:zmx | eDrawing:eprt | Code V:seq | EO Spec Sheet

Download All

General

Type:	Cylinder Lens, Plano-Concave

Physical & Mechanical Properties

Diameter (mm):	25.00 +0.0/-0.2	**Center Thickness CT (mm):**	3.50
Center Thickness Tolerance (mm):	±0.1	**Edge Thickness ET (mm):**	5.57

Optical Properties

Effective Focal Length EFL (mm):	-75.00	**Substrate:** ⓘ	N-BK7
f/#:	3.00	**Numerical Aperture NA:**	0.17
Coating:	MgF_2 (400-700nm)	**Wavelength Range (nm):**	400 - 700
Back Focal Length BFL (mm):	-77.31	**Coating Specification:**	R_{avg} ≤1.75% @ 400 - 700nm
Focal Length Tolerance (%):	±3	**Radius R_1 (mm):**	-38.76
Surface Quality:	60-40	**Damage Threshold, By Design:** ⓘ	10 J/cm^2 @ 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

- Cylinder Lenses Ideal for 1 Dimensional Laser Beam Convergence
- Circular and Rectangular Form Factors
- Multiple Coating Options Available

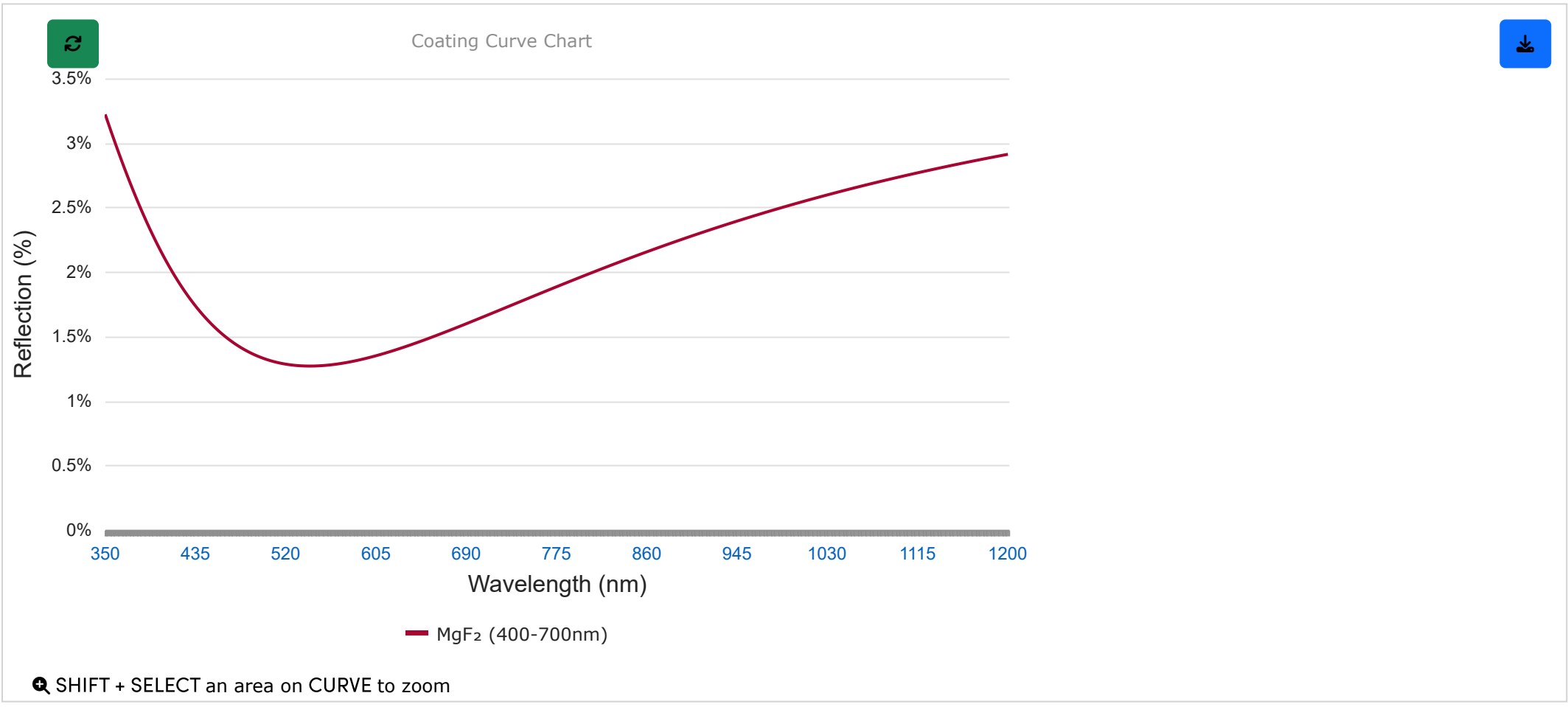
TECHSPEC® Illumination Grade PCV Cylinder Lenses are commonly used to turn a collimated laser source into a line generator. These PCV Cylinder Lenses and **TECHSPEC Illumination Grade PCX Cylinder Lenses** can be used together for beam expander applications.

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

MgF_2 (400-700nm)



Please note that coating performance outside each product's specified design range is theoretical and may vary.

Related Products

Laser Grade Broadband Cylinder Lenses

Laser Grade Laser Line Cylinder Lenses

Imaging Grade PCV Cylinder Lenses

Illumination Grade PCX Cylinder Lenses

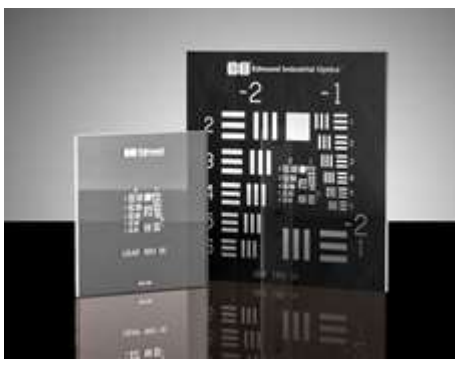
Frequently Purchased Together

#01-307 – 25,400 Lines/Inch, 2" Square Card, 15/Pack, Holographic Diffraction Grating Film
C$39.90

Qty

#35-111 – 20mm Max. Aperture, Iris Diaphragm
C$79.80

Qty



#38-257 – 2" x 2" Positive, USAF 1951 Resolution Target
C$305.20

Qty

#43-736 – 25mm Diameter, 50R/50T, Plate Beamsplitter
C$85.40

Qty

Resources

Media Type

- [ ] Application Note
- [ ] Trending in Optics
- [ ] Published Article
- [ ] FAQ
- [ ] Glossary
- [ ] Video

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

Laser Beam Shaping Overview

TRENDING IN OPTICS

Non-Circular Optics for System Miniaturization

APPLICATION NOTE

What are Cylinder Lenses?

APPLICATION NOTE

Considerations When Using Cylinder Lenses

PUBLISHED ARTICLE

Cylinder Lenses for Beam Shaping

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