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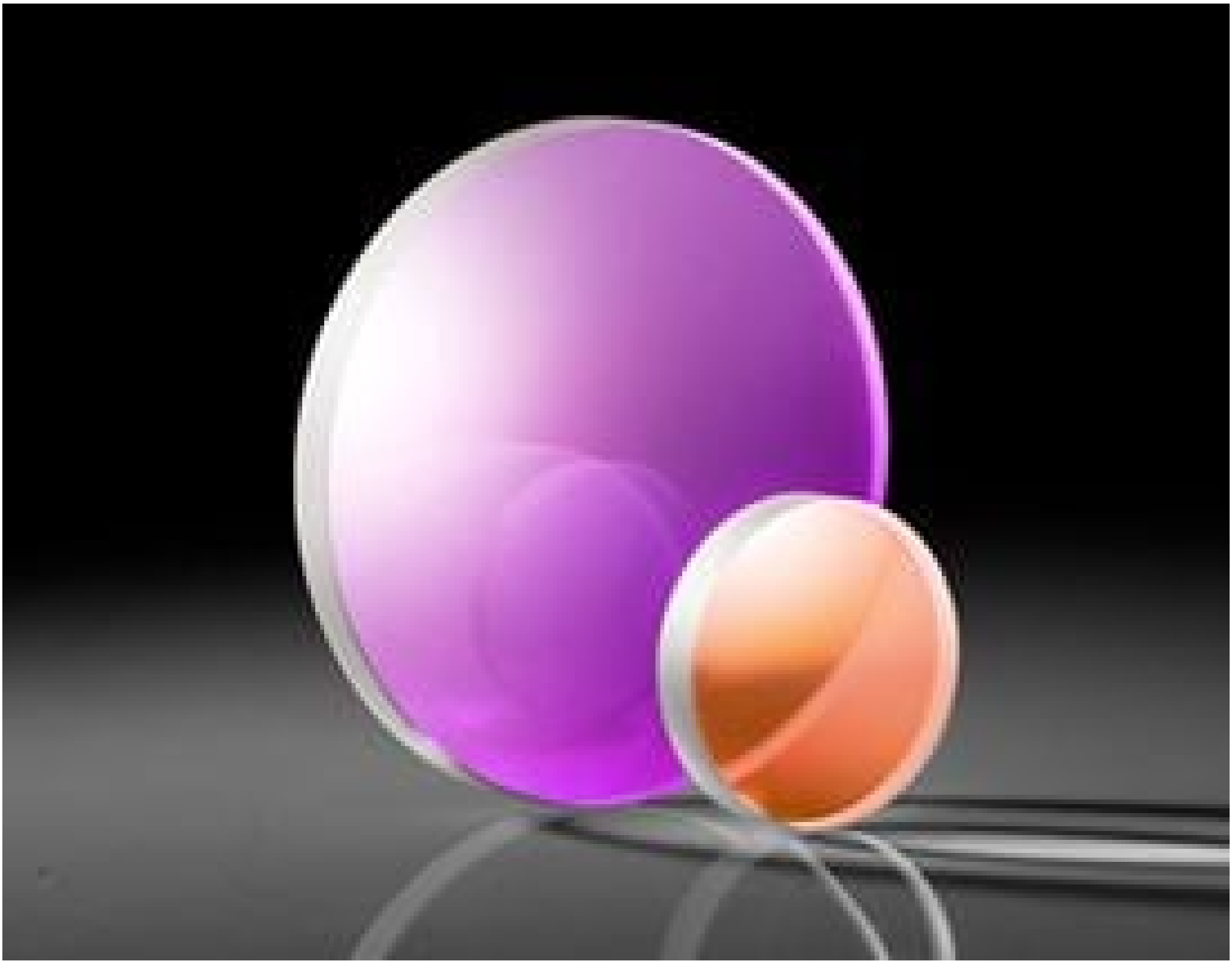
TECHSPEC 50.8mm Dia. x 100mm FL, 266nm Coated, Laser Grade PCX Lens



TECHSPEC Laser Grade PCX Lenses

Stock **#70-013** **4 In Stock**

Other Coating Options

- 1 + S$613.20

ADD TO CART

Volume Pricing	
Qty 1-5	**S$613.20** each
Qty 6-25	**S$490.00** each
Qty 26-49	**S$449.40** each
Need More?	Request Quote

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

50.80 +0.00/-0.025

Centering (arcmin):

<1

Center Thickness CT (mm):
12.00

Edge Thickness ET (mm):
4.32

Clear Aperture CA (mm):
45.72

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
100.00 @ 355nm

Back Focal Length BFL (mm):
91.773

Coating:
Laser V-Coat (266nm)

Coating Specification:
R_{abs} <0.25% @ 266nm

Substrate:
Fused Silica (Corning 7980)

Surface Quality:
10-5

Power (P-V) @ 632.8nm:
λ

Irregularity (P-V) @ 632.8nm:
λ/10 ±1

Radius R_1 (mm):
45.85

f/#:
1.97

Numerical Aperture NA:
0.25

Design Wavelength DWL (nm):
266

Damage Threshold, By Design:
3 J/cm^2 @ 266nm, 20ns, 20Hz

Regulatory Compliance

Certificate of Conformance:
View

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

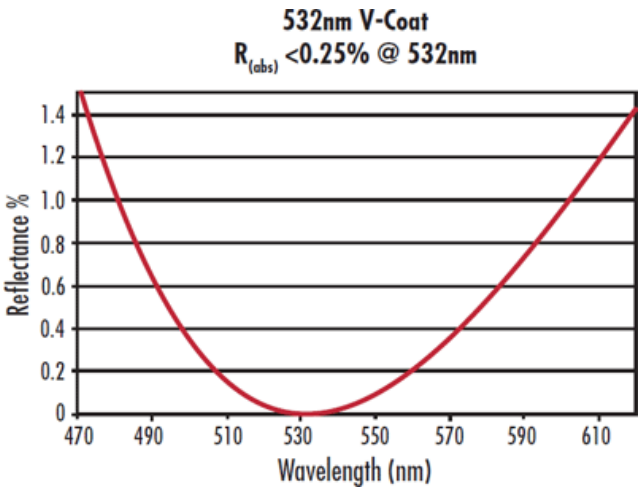
Learn more about our custom manufacturing capabilities or submit an inquiry here.

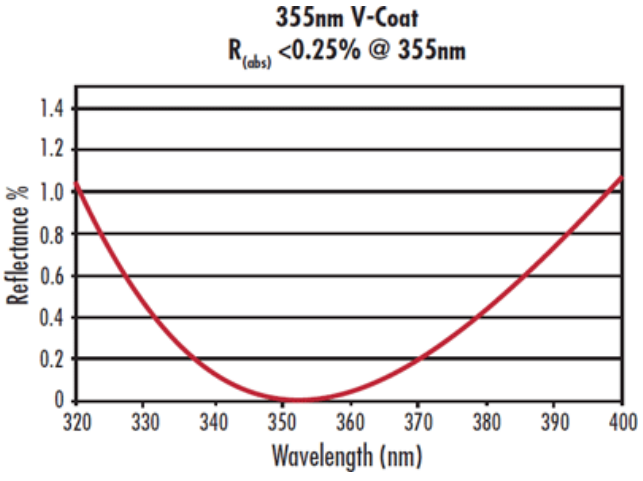
Product Details

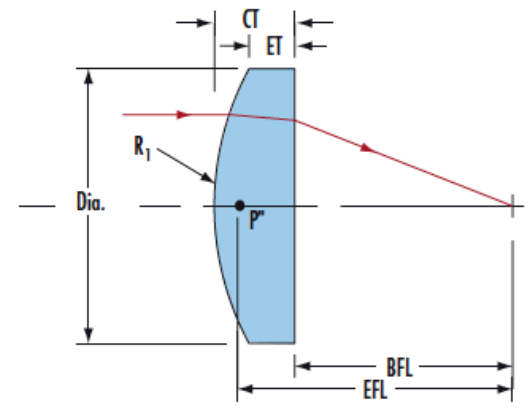
- Guaranteed Laser Damage Threshold
- 10-5 Surface Quality
- λ/10 Surface Accuracy

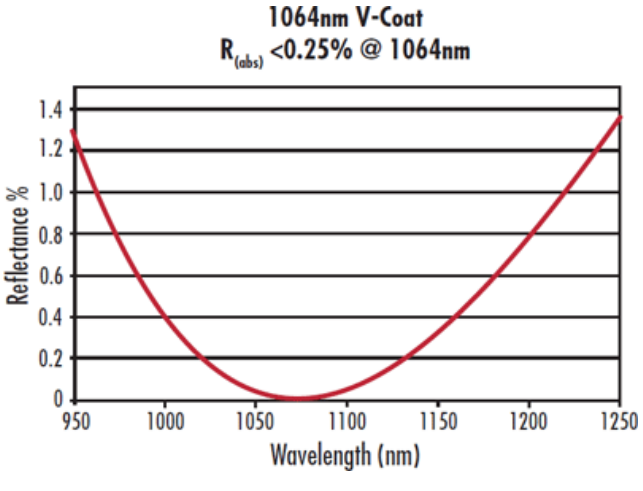
TECHSPEC® Laser Grade PCX Lenses are designed for high energy Nd:YAG laser applications including laser cutting, machining, and welding. The precision fused silica substrate, featuring λ/10 surface accuracy and 10-5 surface quality, ensures low scatter and excellent transmitted wavefront performance. TECHSPEC® Laser Grade PCX Lenses are available uncoated or with a variety of high laser damage threshold anti-reflection (AR) coating options. Coatings are available at the most common Nd:YAG laser wavelengths to ensure maximum laser throughput.

Technical Information


532nm V-Coat
R(abs) <0.25% @ 532nm
Reflectance %
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
470
490
510
530
550
570
590
610
Wavelength (nm)


355nm V-Coat
R(abs) <0.25% @ 355nm
Reflectance %
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
320
330
340
350
360
370
380
390
400
Wavelength (nm)


CT
ET
R1
Dia.
P'
BFL
EFL


1064nm V-Coat
R(abs) <0.25% @ 1064nm
Reflectance %
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
950
1000
1050
1100
1150
1200
1250
Wavelength (nm)

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