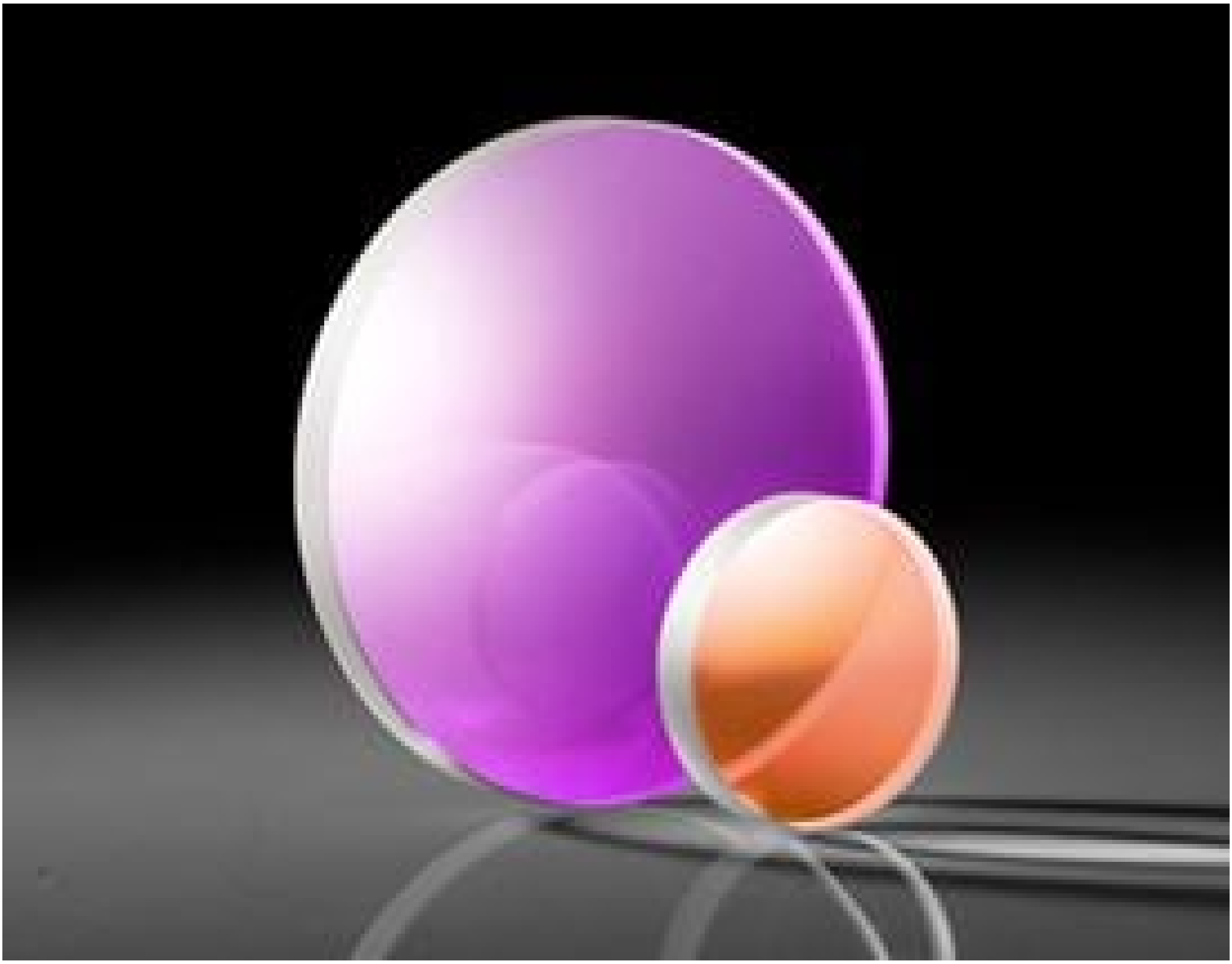
TECHSPEC 50.8mm Dia. x 250mm FL, 266nm Coated, Laser Grade PCX Lens



TECHSPEC Laser Grade PCX Lenses

Stock **#70-016** **5 In Stock**

Other Coating Options

- 1 + A$700.80

ADD TO CART

Volume Pricing	
Qty 1-5	**A$700.80** each
Qty 6-25	**A$560.00** each
Qty 26-49	**A$513.60** each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS

General

Type:
Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
50.80 +0.00/-0.025

Centering (arcmin):
<1

Center Thickness CT (mm):
8.00

Edge Thickness ET (mm):
5.15

Clear Aperture CA (mm):
45.72

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
250.00 @ 355nm

Back Focal Length BFL (mm):
244.514

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):
114.62

f/#:
4.92

Numerical Aperture NA:
0.10

Design Wavelength DWL (nm):
266

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

Regulatory Compliance

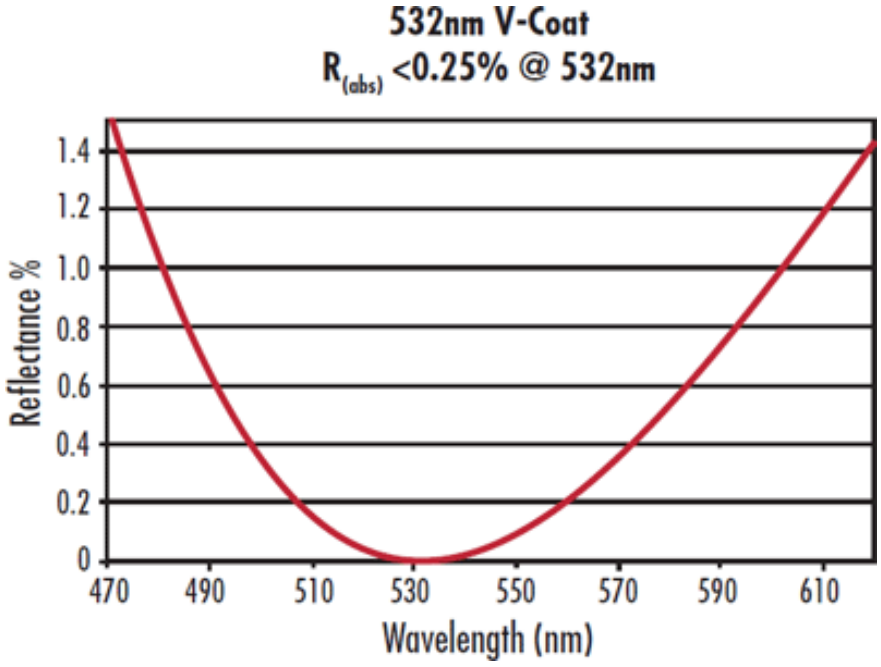
Certificate of Conformance:
View

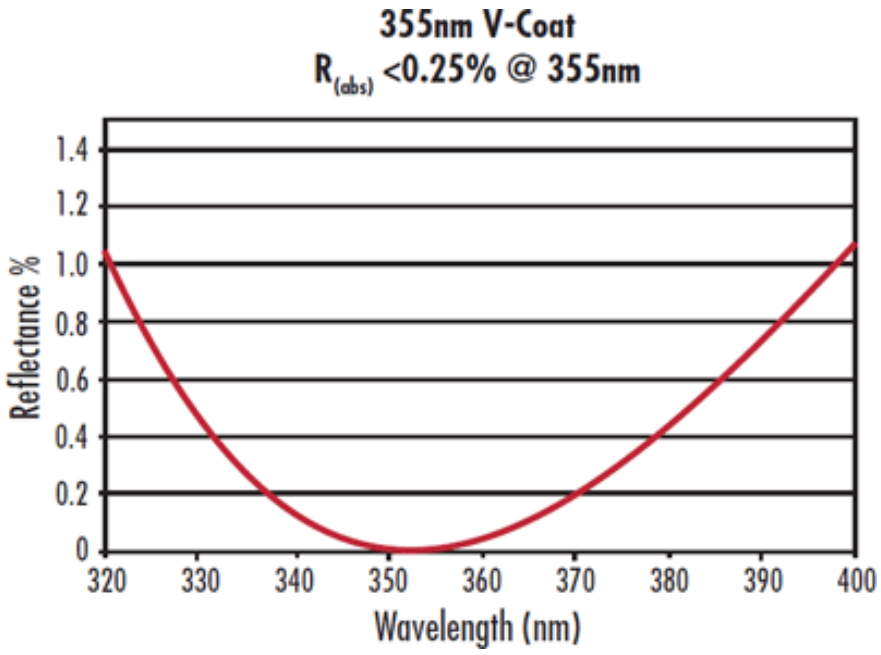
PRODUCT DETAILS

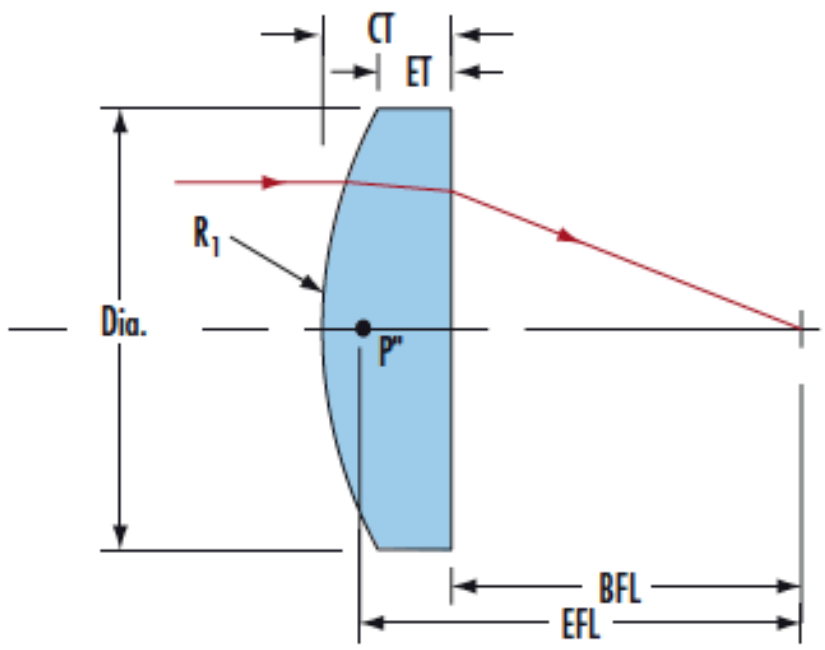
- Guaranteed Laser Damage Threshold
- 10-5 Surface Quality
- λ/10 Surface Accuracy

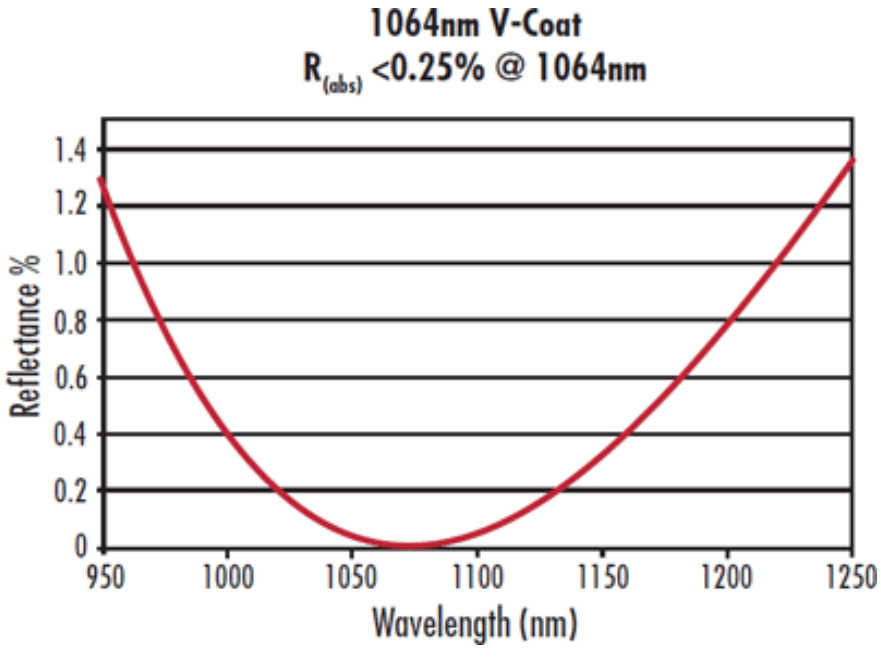
TECHSPEC® Laser Grade PCX Lenses are designed for high energy Nd:YAG laser applications including laser cutting, machining, and welding. The precision fused silica substrate, featuring λ/10 surface accuracy and 10-5 surface quality, ensures low scatter and excellent transmitted wavefront performance. 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)

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.**