

20mm Dia. x 16.4mm FL, Uncoated Molded Aspheric Condenser Lens



Molded Aspheric Condenser Lenses

Stock #15-174 **20+ In Stock** [Other Coating Options](#)

1

C\$62^{.30}

ADD TO CART

Volume Pricing	
Qty 1-10	C\$62.30 each
Qty 11-49	C\$54.60 each
Need More?	Request Quote

Product Downloads

- STEP:step
- PDF Drawing:pdf
- IGES:igs
- Zemax:zar
- eDrawing:eprt
- Code V:seq
- EO Spec Sheet
- [Download All](#)

General

Type: Condenser Lens

Note: [Click here](#) for more information on the ISO 10110 surface quality specification.

Physical & Mechanical Properties

Diameter (mm):	20.00 +/-0.3	Centering (arcmin):	≤25
Clear Aperture CA (mm):	18.00	Edge Thickness ET (mm):	1.5
Center Thickness CT (mm):	6.40 ±0.20	Bevel:	Protective as needed
Diameter of Asphere (mm):	20.0	Shape of Back Surface:	Convex

Optical Properties

Effective Focal Length EFL (mm):	16.40 @ 587.6nm	Numerical Aperture NA:	0.61
Back Focal Length BFL (mm):	11.30	Substrate: Liba2000+	
Focal Length Tolerance (%):	±5	Coating:	Uncoated
Surface Quality:	Molded Side: 5/3 x 0.4; E 0.2 Polished Side: 5/3 x 0.25; E 0.2	f/#:	0.82

Abbe Number (v_d):	58.85	Index of Refraction (n_d):	1.520
Radius R₂ (mm):	44.97	Wavelength Range (nm):	350 - 2000
Conjugate Distance:	Infinite	Focal Length Specification Wavelength (nm):	587.6

Material Properties

Coefficient of Thermal Expansion CTE (10⁻⁶/°C):	9.4
---	-----

Regulatory Compliance

RoHS 2015: Compliant	Certificate of Conformance: View
Reach 242: Compliant	

Product Details

- Hardened for Improved Durability
- High Numerical Apertures
- Ideal for Illumination Applications

Molded Aspheric Condenser Lenses are pressed, hardened, and annealed to meet precise optical and mechanical specifications. The hardening process improves the durability of the lenses, making them less susceptible to thermal shock and scratching than traditionally polished lenses. These Molded Aspheric Condenser Lenses are ground and polished on the second surface, enhancing the overall precision of the lenses. Molded Aspheric Condenser lenses are ideal for a wide range of illumination and detection applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

Technical Information

Frequently Purchased Together



#03-668 - 2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount
C\$88.20



#32-000 - 18.0mm Dia. x 36.0mm FL Uncoated, Plano-Convex Lens
C\$45.15





#32-487 - 30.0mm Dia. x 100.0mm FL Uncoated, Plano-Convex Lens
C\$56.35



#32-859 - 18.0mm Dia. x 72.0mm FL, Uncoated, Plano-Convex Lens
C\$45.15

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	20.0mm Optic Dia., Optic Mount	Fixed		#64-559	C\$45.85 Request Quote	14 In Stock <input type="text" value="1"/> 

Check out our full selection of mounts [here](#).

Resources

Media Type

- Application Note
- Scientific Paper
- Trending in Optics
- Video
- Published Article
- FAQ
- Glossary

APPLICATION NOTE

**Anti-Reflection
(AR) Coatings**

APPLICATION NOTE

**An
Introduction to
Optical
Coatings**

CASE STUDIES

**Laser Optics
for Eye
Surgery**

APPLICATION NOTE

**Lens Geometry
Performance
Comparison**

APPLICATION NOTE

**All About
Aspheric
Lenses**

WEBINARS

**Design
Considerations
for Custom
Aspheres**

[View More](#)