12mm Dia. x 12.5mm FL, MgF_2 Molded Aspheric Condenser Lens

Molded Aspheric Condenser Lenses

Stock #35-065 20+ In Stock Other Coating Options

- 1 + C$66.85

ADD TO CART

Volume Pricing	
Qty 1-10	C$66.85 each
Qty 11-49	C$58.80 each
Need More?	Request Quote

Product Downloads

STEP:step | STEP:stp | 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):	12.00 +/-0.3	**Centering (arcmin):**	≤30
Clear Aperture CA (mm):	9.50	**Edge Thickness ET (mm):**	1.9
Center Thickness CT (mm):	4.50 ±0.20	**Bevel:**	Protective as needed
Diameter of Asphere (mm):	12.0	**Shape of Back Surface:**	Plano

Optical Properties

Effective Focal Length EFL (mm):	12.50 @ 587.6nm	**Numerical Aperture NA:**	0.48
Back Focal Length BFL (mm):	9.50	**Substrate:** ⓘ	Liba2000+
Focal Length Tolerance (%):	±5	**Coating:**	MgF_2 (400-700nm)
Coating Specification:	R_{avg} ≤ 1.75% @ 400 - 700nm	**Surface Quality:**	Molded Side: 5/3 x 0.4; E 0.2 Polished Side: 5/3 x 0.25; E 0.2
f/#:	1.04	**Abbe Number (v_d):**	58.85

Index of Refraction (n_d):	1.520	**Radius R_2 (mm):**	Plano
Wavelength Range (nm):	400 - 700	**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

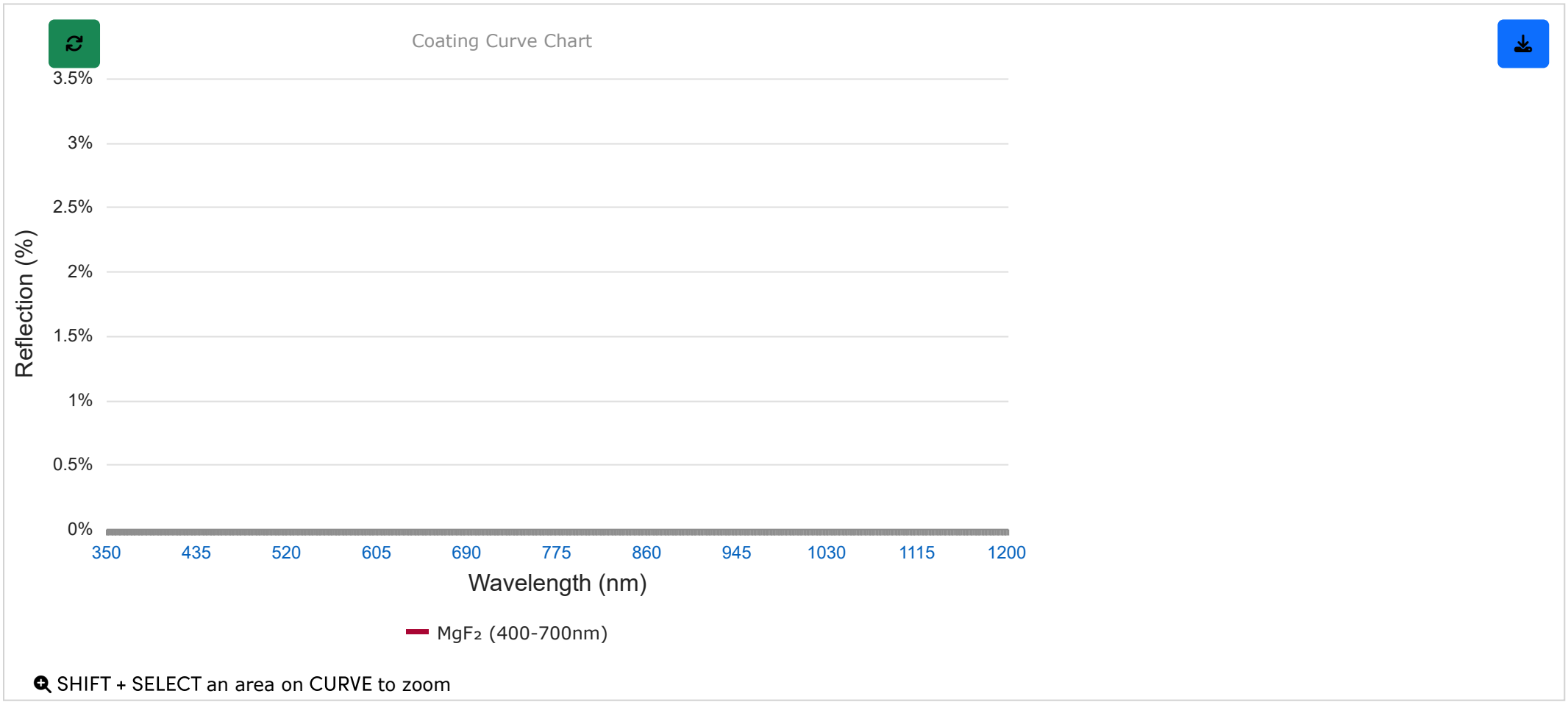
- Hardened for Improved Durability
- High Numerical Apertures
- Ideal for Illumination Applications

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

Coating Curves

MgF_2 (400-700nm)



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

Frequently Purchased Together

#32-478 – 25.0mm Dia. x 50.0mm FL, MgF_2 Coated, Plano-Convex Lens
C$56.70

Qty

#32-480 – 25.0mm Dia. x 75.0mm FL, MgF_2 Coated, Plano-Convex Lens
C$56.70

Qty

#33-335 – 648nm CWL, 12.5mm Dia, 14nm Bandwidth, OD 6 Fluorescence Filter
C$397.60

Qty

#33-425 – LightPath 354125 | 11mm Dia., 0.50 NA, BBAR (350-700nm), Molded Aspheric Lens
C$166.60

Qty

Compatible Mounts

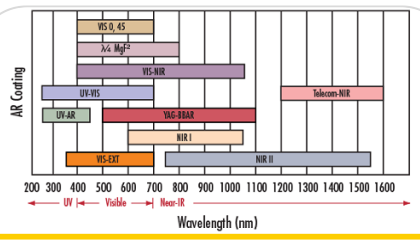
	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	12.0mm Optic Dia., Optic Mount	Fixed		#64-555	C$45.85 Request Quote	10 In Stock 1
MORE+ 	12mm Inner Single Optic Mount	Fixed		#38-749	C$57.40 Request Quote	20+ In Stock 1
MORE+ 	12mm Diameter, C-Mount Thin Optic Mount	Fixed		#54-615	C$83.30 Request Quote	5 In Stock 1
MORE+ 	12mm Inner Pair Optic Mounts	Fixed		#11-405	C$112.70 Request Quote	10 In Stock 1

Check out our full selection of mounts **here**.

Resources

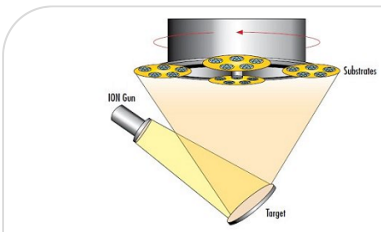
Media Type

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



APPLICATION NOTE

Anti-Reflection (AR) Coatings

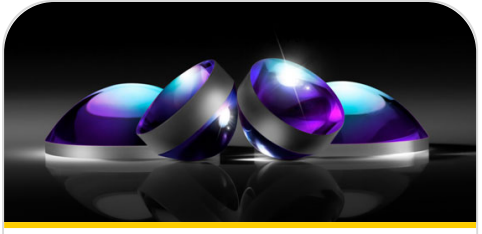


APPLICATION NOTE

An Introduction to Optical Coatings

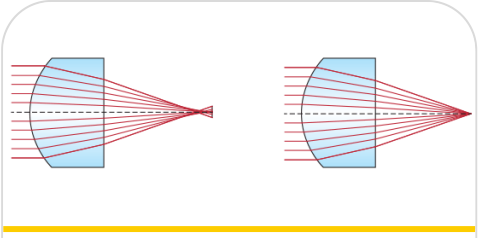
CASE STUDIES

Laser Optics for Eye Surgery



APPLICATION NOTE

Lens Geometry Performance Comparison



APPLICATION NOTE

All About Aspheric Lenses

WEBINARS

Design Considerations for Custom Aspheres

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