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8.5mm Dia. x 7.4mm FL, Uncoated Molded Aspheric Condenser Lens



Molded Aspheric Condenser Lenses

Stock **#34-457** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ €35⁰⁰

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Volume Pricing	
Qty 1-10	€35,50 each
Qty 11-49	€32,00 each
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! Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Condenser Lens **Type:**

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

Physical & Mechanical Properties

8.50 +/-0.3	Diameter (mm):
≤25	Centering (arcmin):
6.80	Clear Aperture CA (mm):
1.8	Edge Thickness ET (mm):
4.00 ±0.20	Center Thickness CT (mm):
Protective as needed	Bevel:
8.5	Diameter of Asphere (mm):
Plano	Shape of Back Surface:

Optical Properties

7.40 @587.6nm	Effective Focal Length EFL (mm):
0.57	Numerical Aperture NA:
4.80	Back Focal Length BFL (mm):
Liba2000+	Substrate: <input type="checkbox"/>
±5	Focal Length Tolerance (%):
Uncoated	Coating:
Molded Side: 5/3 x0.4; E 0.2 Polished Side: 5/3 x0.25; E 0.2	Surface Quality:
0.87	f#:
58.85	Abbe Number (v_d):
1.520	Index of Refraction (n_d):
Plano	Radius R₂ (mm):
350 - 2000	Wavelength Range (nm):
Infinite	Conjugate Distance:
587.6	Focal Length Specification Wavelength (nm):

Material Properties

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

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

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

MgF₂ Coating

R_{avg} ≤ 1.75% @ 400 - 700nm

Typ. Energy Density Limit: 10 J/cm² @ 532nm, 10ns

