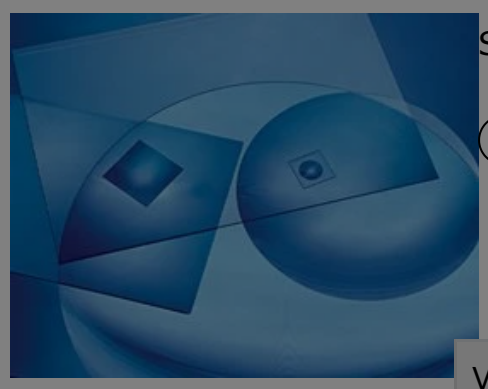
1.5" x 1.5", 0.6" F...



Aspherically Contoured Fresnel Lenses

S...

- 1 +

€39,00

ADD TO CART

Volume Pricing	
Qty 1-10	**€39,00** each
Qty 11-49	**€33,00** each
Need More?	**Request Quote**

Prices shown are exclusive of VAT/local taxes

Product Downloads

Zemax:zar | Zemax:zmx | Code V:seq | EO Spec Sheet

Download All

General

Type:	Fresnel Lens

Physical & Mechanical Properties

Center Thickness CT (inches):	0.06	**Dimensional Tolerance (inches):**	±0.05
Dimensions (inches):	1.5 x 1.5	**Dimensions (mm):**	38.1 x 38.1
Effective Diameter (inches):	1.0	**Thickness Tolerance (%):**	±40

Optical Properties

Effective Focal Length EFL (mm):	15.24	**Substrate:** ⓘ	Acrylic
Coating:	Uncoated	**Wavelength Range (nm):**	400 - 1100
Effective Focal Length EFL (inches):	0.60	**Groove Density (grooves/inch):**	200.00
Index of Refraction (n_d):	1.49	**Transmission (%):**	85 (Typical)

Environmental & Durability Factors

Operating Temperature (°C):	80 (Maximum)		

Regulatory Compliance

RoHS 2015:	**Compliant**	**Certificate of Conformance:**	**View**

Reach 242:	Compliant

Product Details

- Thin, Flat Lenses for Focusing Applications
- Large Sizes for Maximum Light Collection
- Aspherically-Grooved Contours for Enhanc

Aspherically Contoured Fresnel Lenses are thin, flat lenses for focusing applications. A Fresnel lens replaces the curved surface of a conventional lens with a series of concentric grooves, molded into the surface of a thin, lightweight plastic sheet. The grooves act as individual refracting surfaces, like tiny prisms when viewed in cross section, bending parallel rays in a very close approximation to a common focal length. Aspherically Contoured Fresnel Lenses are thin, so very little light is lost by absorption. Fresnel lenses are a compromise between efficiency and image quality. High groove density allows higher quality images, while low groove density yields better efficiency (as needed in light gathering applications). In infinite conjugate systems, the grooved side of the lens should face the longer conjugate.

Fresnel lenses are most often used in light gathering applications, such as condenser systems or emitter/detector setups. Fresnel lenses can also be used as magnifiers or projection lenses; however, due to the high level of distortion, this is not recommended.

Technical Information

Frequently Purchased Together

#01-307 – 25,400 Lines/Inch, 2" Square Card, 15/Pack, Holographic Diffraction Grating Film
€28,50
Qty

#03-668 – 2.0 – 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount
€63,00
Qty

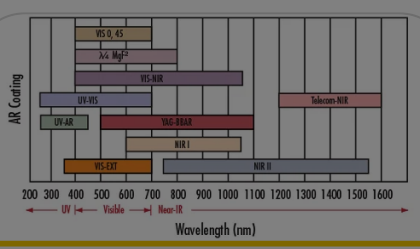
#32-008 – 9.0mm Dia. x 18.0mm FL Uncoated, Plano-Convex Lens
€30,50
Qty

#32-303 – 6.25mm Dia. x 20mm FL, MgF_2 Coated, Achromatic Doublet Lens
€71,00
Qty

Resources

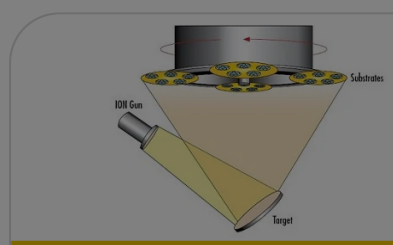
Media Type

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



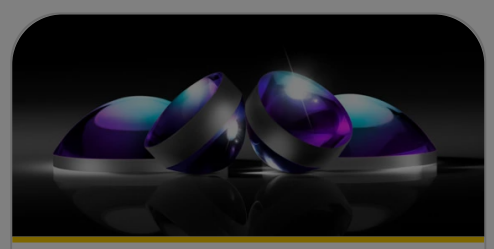
APPLICATION NOTE

Anti-Reflection (AR) Coatings



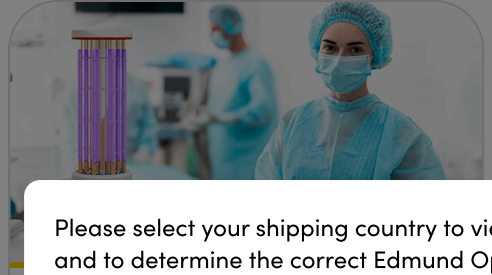
APPLICATION NOTE

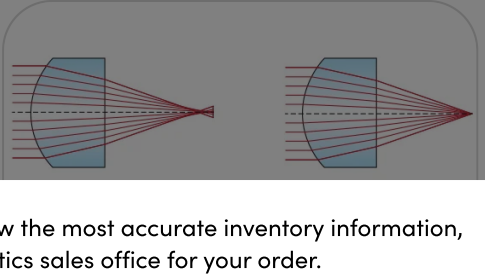
An Introduction to Optical Coatings

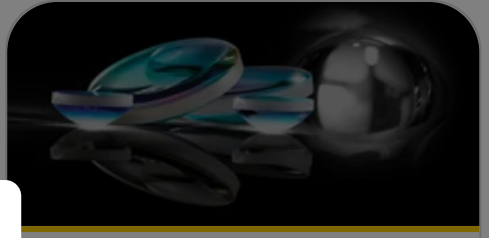


APPLICATION NOTE

Lens Geometry Performance Comparison







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