

TECHSPEC®

10mm Dia. x 100mm FL, MgF₂ Coated, Achromatic Doublet Lens



Stock #63-699 **20+ In Stock** [Other Coating Options](#)

- 1 + £62.⁰⁰

ADD TO CART

MgF₂ Coated Achromatic Lenses



Volume Pricing	
Qty 1-5	£62.00 each
Qty 6-25	£49.20 each
Qty 26-49	£46.80 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads	
STEP:stp	PDF Drawing:pdf
ISO 10110 Drawing	
IGES:igs	Spec Sheets:pdf
Zemax:zar	Zemax:zmx
eDrawing:easm	Code V:seq
EO Spec Sheet	Download All

General

Type: Achromatic Lens

Physical & Mechanical Properties

Diameter (mm):	10.00 +0.0/-0.025	Clear Aperture CA (mm):	9.00
Centering (arcmin):	<1	Center Thickness CT (mm):	4.00 ±0.10
Center Thickness CT 1 (mm):	2.50 ±0.05	Center Thickness CT 2 (mm):	1.50 ±0.05
Edge Thickness ET (mm):	3.70	Bevel:	Protective as needed

Optical Properties

Effective Focal Length EFL (mm):	100.00	Focal Length Tolerance (%):	±1
Back Focal Length BFL (mm):	98.16	Focal Length Specification Wavelength (nm):	587.6
Radius R₁ (mm):	60.99	Radius R₂ (mm):	-43.74
Radius R₃ (mm):	-130.98	Substrate: ⓘ	N-BK7 / N-SF5
Surface Quality:	40-20	f/#:	10.00

Numerical Aperture NA:	0.05	Coating:	MgF ₂ (400-700nm)
Coating Specification:	R _{avg} ≤1.75% @ 400 - 700nm	Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4	Wavelength Range (nm):	400 - 700

Regulatory Compliance

RoHS 2015:	Compliant	Reach 224:	Compliant
Certificate of Conformance:	View		

Need different specs or modifications?

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

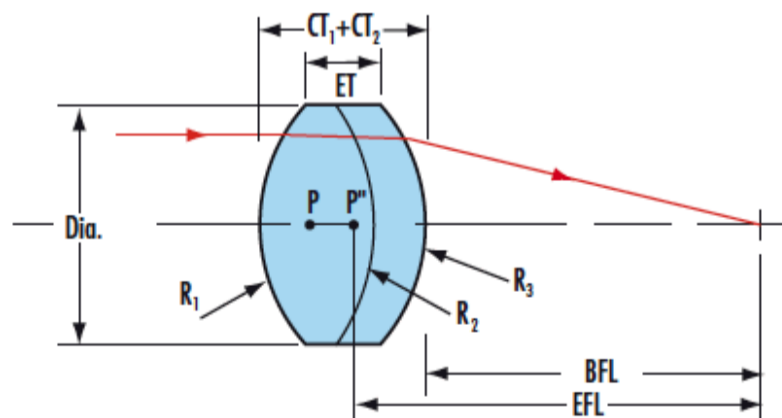
Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- Designed for 0° Angle of Incidence
- Less Than 1.75% Reflectance Per Surface @ 400 - 700nm
- **VIS 0°** and **VIS-NIR** Coated Achromats Also Available

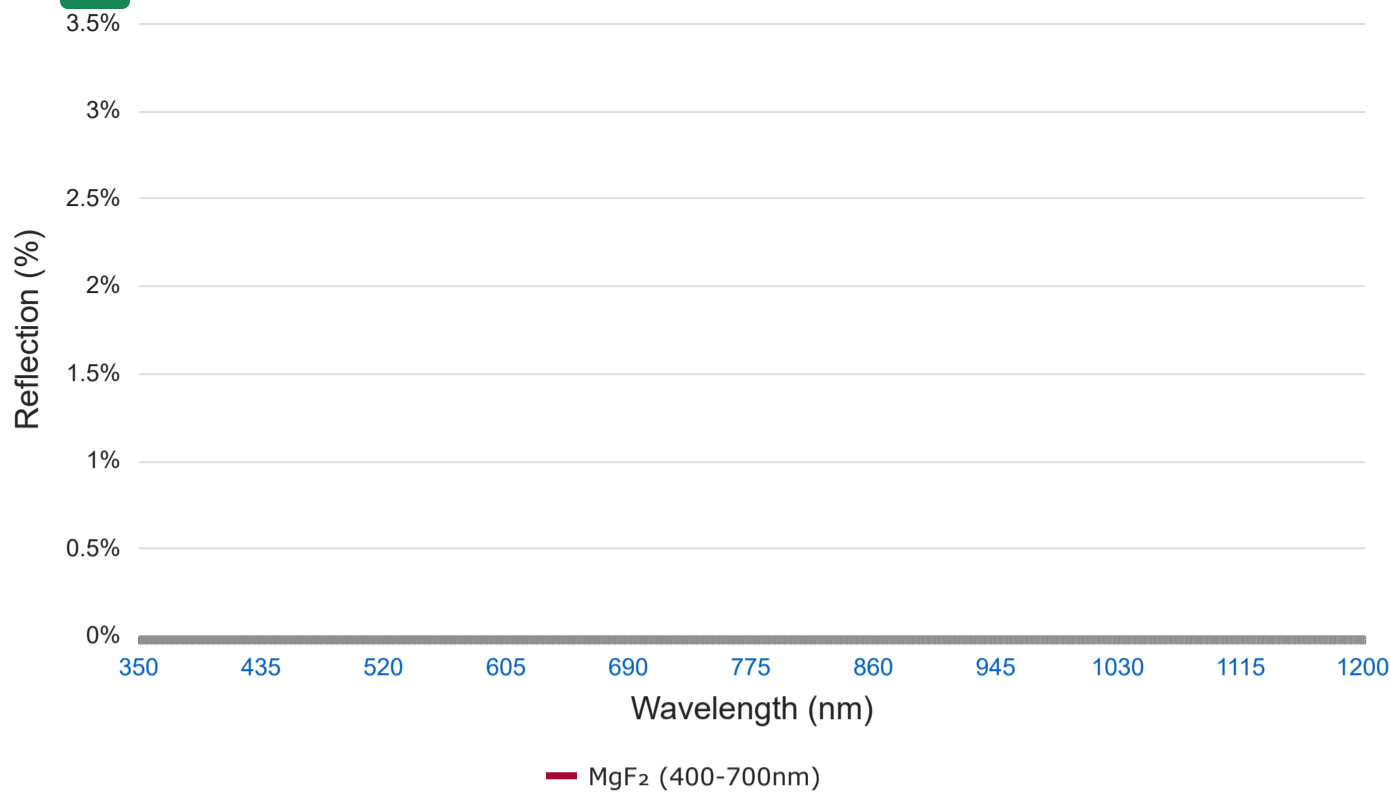
TECHSPEC® MgF₂ Coated Achromatic Lenses consist of two optical components cemented together to form an achromatic doublet which is computer optimized to correct for on-axis spherical and chromatic aberrations. These lenses feature a single layer of MgF₂ which provides less than 1.75% reflectivity from 400 – 700nm. TECHSPEC MgF₂ Coated Achromatic Lenses are best for applications involving multi-color (white light) imaging due to their specific doublet lens pairing that enables them to correct the color separation inherent in glass. Having eliminated the problematic chromatic aberrations, achromatic doublet lenses become the most cost-efficient means for polychromatic illumination and imaging.

Technical Information



Coating Curves

MgF₂ (400-700nm)



SHIFT + SELECT an area on CURVE to zoom

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

Related Products



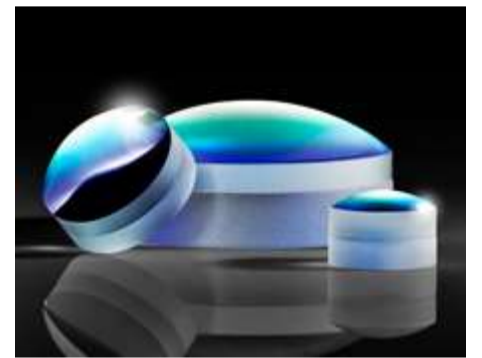
Optic Component Mounts



C, S, and T-Mount Circular Optic Mounts



Basic and Plus Optical Component Cleaning Kits



Aspherized Achromatic Lenses

Frequently Purchased Together



#03-628 - 23mm Diameter, C-Mount Eyepiece Mount
£37.20

Qty



#03-629 - C-Mount Double Male Thread Ring
£29.40

Qty



#32-305 - 6.25mm Dia. x 25mm FL, MgF₂ Coated, Achromatic Doublet Lens
£56.80

Qty



#32-600 - 5mm 50R/50T Cube Beamsplitter
£164.00

Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price	Buy
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MORE+



10.0mm Optic Dia., Optic Mount







Fixed

#64-554

£26.20
Request Quote

20+ In Stock

1

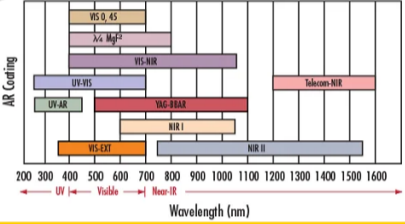
	Title	Type	Compare	Stock Number	Price	Buy
MORE+ 	10mm Diameter, S-Mount Thick Optic Mount	Fixed		#63-951	£32.60 Request Quote	20+ In Stock <input type="text" value="1"/> 
MORE+ 	25mm Cage 10mm Diameter Lens Mount	Fixed		#85-551	£36.60 Request Quote	4 In Stock <input type="text" value="1"/> 
MORE+ 	10mm Diameter, C-Mount Thick Optic Mount	Fixed		#63-980	£45.20 Request Quote	20+ In Stock <input type="text" value="1"/> 

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

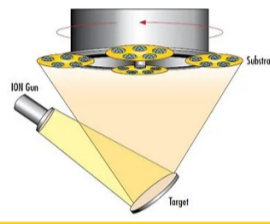
Resources

Media Type


- Application Note
- Scientific Paper
- Video
- FAQ
- Glossary



APPLICATION NOTE
Anti-Reflection (AR) Coatings



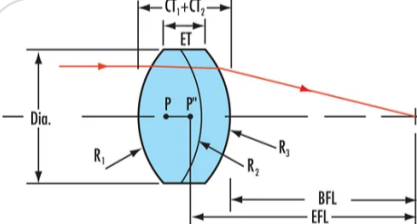
APPLICATION NOTE
An Introduction to Optical Coatings



APPLICATION NOTE
Lens Geometry Performance Comparison



SCIENTIFIC PAPER
Achrotech: achromat cost versus performance...



APPLICATION NOTE
Why Use an Achromatic Lens?



VIDEO
Achromatic Lenses Review

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