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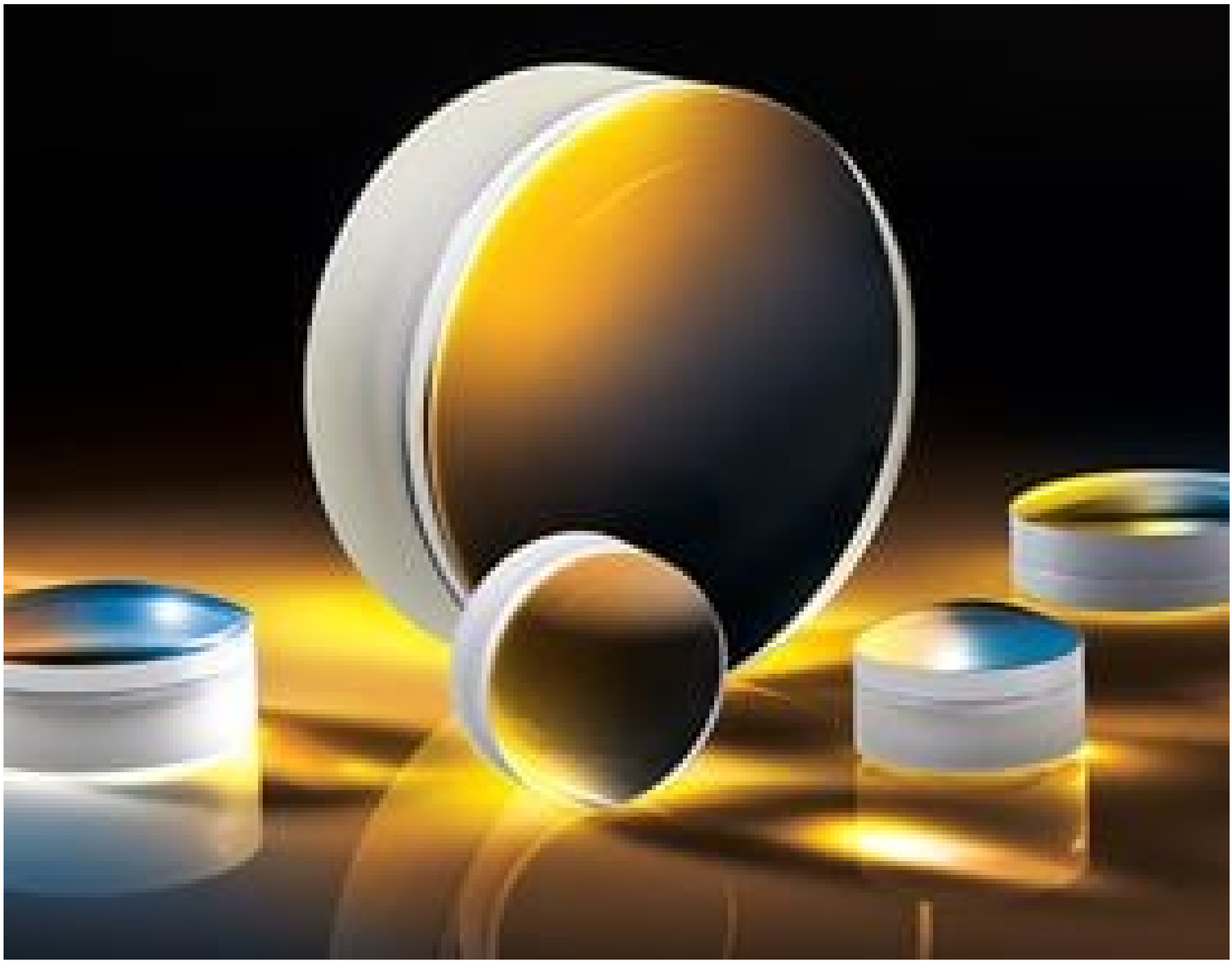
TECHSPEC 12.5mm Dia. x 45mm FL, VIS-NIR, Inked, Achromatic Lens



Stock **#49-327-INK** CONTACT US

Other Coating Options

- 1 + **€108**.00

ADD TO CART

Volume Pricing	
Qty 1-5	**€108,00** each
Qty 6-25	**€86,00** each
Qty 26-49	**€81,50** each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Achromatic Lens

Physical & Mechanical Properties

Diameter (mm):	12.50 ±0.025
Clear Aperture CA (mm):	11.50
Centering (arcmin):	<1
Center Thickness CT (mm):	5.00 ±0.10
Center Thickness CT 1 (mm):	3.50 ±0.05
Center Thickness CT 2 (mm):	1.50 ±0.05
Edge Thickness ET (mm):	3.94
Bevel:	Protective as needed

Optical Properties

Effective Focal Length EFL (mm):	45.00
Focal Length Tolerance (%):	±1
Back Focal Length BFL (mm):	42.52
Focal Length Specification Wavelength (nm):	587.6
Radius R_1 (mm):	26.82
Radius R_2 (mm):	-20.12
Radius R_3 (mm):	-61.38
Substrate:	N-BK7 / N-SF5
Surface Quality:	40-20
f/#:	3.6
Numerical Aperture NA:	0.14
Coating:	VIS-NIR (400-1000nm)
Coating Specification:	R_{abs} ≤0.25% @ 880nm R_{avg} ≤1.25% @ 400 - 870nm R_{avg} ≤1.25% @ 890 - 1000nm
Power (P-V) @ 632.8nm:	1.5λ
Irregularity (P-V) @ 632.8nm:	λ/4
Wavelength Range (nm):	400 - 1000

Regulatory Compliance

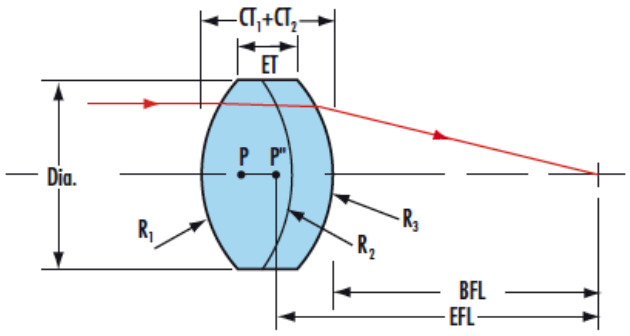
RoHS 2015:	Compliant
REACH 201:	Compliant
Certificate of Conformance:	View

Product Details

- Designed for 0° Angle of Incidence
- Less Than 0.25% Reflectance Per Surface @ 880nm
- MgF_2 and VIS 0° Coated Achromats Also Available

TECHSPEC® VIS-NIR Coated Achromatic Lenses consist of two optical components cemented together to form an achromatic doublet. The doublet is computer optimized to correct for on-axis spherical and chromatic aberrations. TECHSPEC® VIS-NIR Coated Achromatic Lenses have visible/near-infrared broadband anti-reflection coating, which is specially optimized to yield maximum transmission (>99%) in the near-infrared. The achromatic lenses reduce reflection to less than 0.25 percent per surface at 880nm. Magnesium Fluoride coated and VIS 0° coated achromats are also available.

Technical Information



Coating Curves

Custom

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.**

Compatible Mounts