

12.7mm Dia. x 12.7mm FL, Uncoated, ISP Optics Barium Fluoride (BaF₂) DCX Lens | BF-BX-12-12

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Stock **#24-733** **CLEARANCE** **4 In Stock**

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+

C\$714^{.00}

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Volume Pricing	
Qty 1-9	C\$714.00 each
Qty 10+	C\$642.60 each
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General

Type:	
Double-Convex Lens	
Model Number:	
BF-BX-12-12	

Physical & Mechanical Properties	
12.70 +0.00/-0.13	Diameter (mm):
<3	Centering (arcmin):
Protective as needed	Bevel:
5.80 ±0.20	Center Thickness CT (mm):
1.50	Edge Thickness ET (mm):
11.43	Clear Aperture CA (mm):
Optical Properties	

12.70 @ 5µm	Effective Focal Length EFL (mm):
Uncoated	Coating:
Barium Fluoride (BaF ₂)	Substrate: □
60-40	Surface Quality:
λ	Irregularity (P-V) @ 632.8nm:
10.47	Radius R ₁ (mm):
10.471	Radius R ₂ (mm):
1.00	f/#:
±2	Focal Length Tolerance (%):
0.5	Numerical Aperture NA:
200 - 12000	Wavelength Range (nm):

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 240:

Product Details

- Excellent Transmission from 0.2 - 12µm
- Provide High Transmission without AR Coatings
- Ideal for Infrared Spectroscopy and Infrared Imaging Applications

ISP Optics Barium Fluoride (BaF₂) Double-Convex (DCX) Lenses are ideal for infrared spectroscopy and infrared imaging applications requiring high transmission from 0.2 – 12µm. Barium Fluoride features a low index of refraction, enabling excellent transmission from the Vacuum-UV (VUV) to the Long-Wave Infrared (LWR) without the need for Anti-Reflection (AR) coatings. These lenses also provide higher resistance to high-energy radiation than Calcium Fluoride, even though they have similar physical properties. ISP Optics Barium Fluoride (BaF₂) Double-Convex (DCX) Lenses can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the ultraviolet range.

Note: These lenses are very sensitive to thermal shock.

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools